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POLICY RESEARCH WORKING PAPER

1440

Poverty and Social Transfers in Poland

Christiaan Grootaert

How well did Poland's system of social transfers help alleviate poverty in 1993, and what changes in the allocation of social transfer funds would improve the distribution of income?

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Summary findings

Since January 1990, Poland's social safety net has changed greatly. Unemployment benefits were introduced, for example, because of escalating unemployment (about 15 percent of the labor force at the end of 1993). The cost of the social safety net has risen sharply since the transition began, both absolutely and as a fraction of GDP. In 1993, social transfers accounted for 18.7 percent of GDP, as follows: (1) pensions=14.9 percent, (2) unemployment benefits=1.9 percent, (3) family allowance and other social insurance=1.4 percent, and (4) social assistance=0.5 percent.

To investigate the present system's impact on income distribution, Grootaert uses the household budget survey data for January-June 1993, the first complete survey of the Polish population. The conventional benchmark for measuring poverty in Poland, the *social minimum*, has become largely irrelevant, as 55 percent of the people fall below that spending level. Using two other measures, Grootaert finds that in 1993 26.3 percent of the population had an expenditure level (per adult equivalent) below the minimum wage, and 14.4 percent were spending at a level below the minimum pension.

He discusses four proposals for improving the ability of social transfers (other than pensions) to reduce poverty. These proposals are either budget-neutral or imply only modest increases in the total amount of transfers:

- Income-testing the family allowance and doubling the amount for large households. This would reduce poverty from 14.4 to 13.2 percent — and, among large households, from 43 to 28 percent.
- Reducing eligibility for the family allowance from 20 to 18 years and taxing the allowance; providing income-tested daycare vouchers for young children. This would make the family allowance more progressive. Reducing eligibility and taxing the allowance would raise poverty about 1 percentage point, which would be largely offset by the daycare vouchers.
- Improving income testing for social assistance. More than half of current beneficiaries are not poor. A 20 percent improvement in targeting would reduce poverty by about 0.3 percentage points.
- Extending eligibility for unemployment benefits for low-skilled unemployed members of the labor force in large households. This would increase benefits by about 7 percent, but reduce poverty about 0.4 percentage points — benefiting especially the poorest part of the population.

This paper — a product of the Country Operations Division, Europe and Central Asia, Country Department II — is part of a larger effort in the department to undertake poverty assessments in the region. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Nona Sachdeva, room S5-029, extension 82717 (79 pages). March 1995.

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SUMMARY

The objective of this study is to answer the question how the current (1993) system of social transfers in Poland helps the poor and, as a corollary, whether reallocation of funds across different types of social transfers could have a greater poverty alleviation impact. The impact of social transfers on poverty is an important element of the external efficiency of the social safety net.

Since the start of transition in Poland in January 1990, the social safety net has undergone important changes. The major one was the introduction of unemployment benefits, as a result of rapidly emerging unemployment. At the end of 1993, unemployment was estimated at 15 percent of the labor force. In 1993, social transfers accounted for 18.7 percent of GDP:

• pensions	14.9 percent of GDP
• unemployment benefits	1.9 percent of GDP
• family allowance and other social insurance	1.4 percent of GDP
• social assistance	0.5 percent of GDP

The cost of the social safety net has risen sharply since transition, both in absolute real terms and as a fraction of GDP. In the climate of fiscal stringency, the Government of Poland has understandably been concerned to control the growth of the social budget and to ensure that spending achieves the desired distributional objectives. Several proposals have been implemented, and others debated, to revise the social safety net in order to meet better these twin objectives. It seems useful therefore to investigate in some detail what the distributional impact is of the current system, and how it helps to alleviate poverty in Poland.

To that effect, this study uses the most recent available data, namely the 1993 Household Budget Survey (January-June data). This survey is the first one in Poland to cover completely the population. Prior surveys provided representative results only for the four main socio-economic groups: worker households, farmer households, mixed worker-farmer households and pensioner households. Since transition, two new socio-economic groups have emerged: households who obtain their main earnings from self-employment activities in the non-agricultural private sector ("self-employed"), and households whose main income source is social transfers other than pensions or whose main earnings come from casual work ("social income recipients"). The 1993 survey covers all six socio-economic groups.

The conventional benchmark for measuring poverty in Poland, the social minimum, has lost much of its relevance since transition. In 1993, 55 percent of the Polish population had an expenditure level below the social minimum, which makes it no longer useful as a criterion to identify people in poverty. (The Institute of Labor and Social Affairs is currently developing a new method of calculating the social minimum.) Poverty has therefore been measured against two other "minima": the minimum pension and the minimum wage. In 1993, 26.3 percent of the population had an expenditure level (per equivalent adult) below the minimum wage, and 14.4 percent had expenditure below the minimum pension.

Poverty Profile

Among the ***socio-economic groups***, the highest and the lowest poverty incidences occur in the two new groups which have emerged since transition, respectively, the social income recipients and the self-employed. This suggests that transition has widened the distribution of the level of living by extending the two ends of the distribution. The second lowest poverty incidence occurs among pensioners and workers, of whom about 11 percent live below the minimum pension. For pensioners, this is a reversal of the situation prior to transition, when they consistently had the highest poverty figures. For groups with an active connection to the labor market, the highest poverty is now recorded among farmers.

The ***regional variation*** in poverty incidence is less pronounced than across socio-economic group. The Warsaw-region has the lowest poverty incidence, followed by the South. The highest poverty incidence is in the South-East and Central-West. Together those two regions comprise 30 percent of all poor. The absence of strong regional variation in poverty incidence is surprising because different regions in Poland have been affected very differently by economic transition. This could well be a testimony to the well-functioning of the safety net, which, especially through unemployment benefits and pensions, has been able to compensate people to a large degree for the costs of transition, and has effectively prevented that a large number of them fall into poverty.

Nevertheless, there is a ***spatial dimension*** to poverty: poverty incidence is much higher in villages and in small cities. In large cities (more than 200,000 inhabitants), only 5.5 percent of people live below the minimum pension. This percentage uniformly rises with smaller city size, and reaches 22 percent in villages. A similar pattern exists relative to the minimum wage.

Demographic characteristics are important indicators of poverty in Poland. This is especially the case for type of household. Only 3.4 percent of childless couples fall below the minimum pension – many of these households are pensioners. The poverty incidence rises steadily with the number of children. Among households with four or more children, 42.6 percent have an expenditure level per equivalent adult below the minimum pension, and 60.8 percent fall below the minimum wage.

One corollary of this is that ***poverty among children*** is high in Poland – one in five children lives in a household with an expenditure level below the minimum pension. In contrast, the ***poverty rate among elderly people*** (60+) is only 7.6 percent – one half the national average. The strong correlation between poverty and presence of children in the household, makes the presence of children an important candidate for the targeting of social transfers. Currently, only the family allowance and maternity care are based on this criterion. By the same token, the social safety net seems quite effective at protecting elderly people against poverty and further old-age-based interventions do not appear warranted at this time.

There is a strong inverse link between ***poverty and education***. Where the head of household has only vocational or elementary education, poverty incidence is twice as high as in households with more education. Almost two thirds of the Polish population lives in households where the head has only vocational or elementary education.

One remarkable feature of the poverty profile in Poland is the relatively low ***poverty gap*** and its very even distribution across all socio-economic groups, regions, or types of households. The average poverty gap is 16 percent of the minimum wage and 13 percent of the minimum pension and varies by no more than two to three percentage points regardless of the classification considered. This indicates that there is no one group or region in Poland which forms a pocket of deep poverty (at least at the level of aggregation considered in this study). The sole exception is the social income recipients who not only have the highest poverty incidence but whose poverty is also more severe than any other group.

Poverty and Unemployment

Unemployment is perhaps the most visible social ill resulting from transition - in 1993 it affected over 15 percent of the labor force. Unemployment is a major cause of poverty in Poland. The poverty rate among households where there is at least one unemployed person is 27.8 percent – almost twice the national average. Over one third of all poor live in households where there is an unemployed member.

The link between poverty and unemployment is strongest in worker and pensioner households, and in social income recipients households, where 80 percent of poverty is linked to unemployment. However, it is the regional structure of poverty which has the most pronounced link with unemployment. In the five regions with the lowest poverty incidence, the structure of poverty is virtually the same, save for poverty due to unemployment. In the other four regions, differences in poverty among children and the elderly explain most of the differences in total poverty.

The strong link between poverty and unemployment indicates that pro-active labor market policies aimed at employment creation need to be an important ingredient of poverty alleviation policy in Poland. Where these policies are geared in the first place to providing work to the unemployed, they will have the most immediate poverty alleviation impact. However, the link between poverty and education suggests that improved training and education deserves an important role in poverty alleviation for the medium and longer term.

Beneficiaries of the Social Safety Net

This study has distinguished five main categories in the social safety net in Poland: pensions, unemployment benefits, family allowances (including elderly care), other social insurance, and social assistance.

Pensions are the most commonly received benefit – by 53 percent of households. All pensioner households of course receive pensions, but so do over 50 percent of farmer and mixed households and about one fourth of worker households. The second most commonly received social transfer, by 50 percent of households, is the ***family allowance***. Around two thirds of worker, mixed, and self-employed households receive it. Other forms of social insurance (mainly maternity and childcare benefits) are received only by 3.3 percent of households.

Unemployment benefits are received by 9.3 percent of households, fairly evenly distributed over the main socio-economic groups. However, 56.6 percent of social income recipients received unemployment benefits. Since over 70 percent of all households in this category contain an unemployed person, this indicates a concentration of unemployed who no longer receive benefits in this group. Lastly, ***social assistance*** is received by 3.6 percent of all households. It is received fairly equally by the different socio-economic groups, except for the two post-transition groups. Less than one percent of self-employed households benefit from social assistance but 29 percent of social income recipient households receive it. There are virtually no differences by city-size and only minor regional differences.

The extent to which each component of the social safety net is targeted towards the poor differs significantly. Only 41 percent of households below the minimum pension receive a ***pension***, against 55 percent of households above the minimum wage. The average pension received by poor households is 1,851,900 zl. per month, which is well above the minimum pension and the minimum wage (but this amount contributes of course to the expenditure of the entire household). In contrast, the average pension received by the non-poor is 3,080,900 zl. Thus, a higher percentage of non-poor receive pensions, and the amount they receive is also larger.

Unemployment benefits are much more targeted to the poor: 19.2 percent of poor households receive them, against only 7.2 percent of non-poor households. The average monthly benefit is 1,330,000 zl. and does not differ by income-level of the recipient. ***Family allowances*** are also proportionately more received by poor households, but to a lesser degree than unemployment benefits: 64.1 percent of poor households receive the allowances against 46.6 percent of non-poor households. The amount received by poor households (498,300 zl. per month) is also 40 percent higher than that received by non-poor households (mainly because poor households have more children). ***Other social insurance*** are only received by a small number of households, but three times more frequently by poor than non-poor households. This targeting is offset though by the fact that the amounts received by non-poor households are much larger than those received by the poor.

Social assistance is well targeted towards the poor: 9.6 percent of households below the minimum pension benefit from social assistance, against only 2.5 percent of households above the minimum wage. This ratio of almost 4:1 is the best of any component of the social safety net. It stands to reason that the income-testing of social assistance contributes to this. However, the amounts received are slightly higher for non-poor recipients. On average, farmer households receive the least amount of social assistance and social income recipient households the most.

In total, the social safety net in Poland represents 44.9 percent of the expenditure of an average household. Pensions are the lion's share of this, and by themselves contribute 36.5 percent to household expenditure. Unemployment benefits represent three percent of household expenditure and all other non-pension benefits 5.5 percent.

The social safety net is mildly progressive, representing 55.1 percent of average expenditure of households below the minimum pension and 42.7 percent of expenditure of households above the minimum wage. However, this is the sum of two very different effects, due to pensions and the other transfers. The share of household expenditure covered by pensions is actually lower for the poor than the non-poor. In contrast, unemployment benefits contributes 9.2 percent to the expenditure of the poor and only 1.8 percent to the expenditure of the non-poor (a ratio of 5.1:1). The remaining social transfers make up 15.6 percent of the expenditure of the poor against 3.7 percent of those of the non-poor (a ratio of 4.2:1). The progressivity of the social safety net in Poland is thus entirely due to the non-pension components, especially the unemployment benefits and the family allowance.

Closing the Poverty Gap

The success of a social transfer system is not only measured by the degree to which the benefits are received by the poor, but also by the extent to which it contributes to ***closing the poverty gap***. This depends on the extent to which transfers go to people or households who are poor ***prior*** to the receipt of the given benefit (ex-ante targeting) and on the amount of the benefit in relation to the poverty gap. While the social transfer system in Poland is fairly successful in ex-ante targeting, a substantial degree of leakage occurs. Unemployment benefits and social assistance go for almost 50 percent to households who were not poor (above minimum pension) before they received these benefits. In the case of family allowance, 80 percent of recipients were not poor prior to the receipt of the allowance. This means that, depending on the type of transfer, from 30 to 60 percent of the amounts of money being transferred go to the non-poor. ***This suggests that there is significant room in the system for reallocation in favor of the poor.***

For those recipients of social transfers who are poor prior to the receipt of the transfer, one can ask how many of them are moved above the poverty line as a result of the transfer. Because ***pensions*** are by far the largest component of the safety net, they contribute the most to keeping people out of poverty : 63 percent of households who receive pensions would become poor without them. Although the regional distribution of pensions is quite even, the poverty reducing effect of pensions is markedly lower in villages than in cities.

The second best poverty alleviation effect is achieved by ***unemployment benefits***: 30 percent of recipients would be below the poverty line without the benefits. This effect is highest in pensioner and social income recipient households. It is also larger in small cities and villages than in large cities. The poverty reduction impact of unemployment benefits diminishes with household size: 45 percent of childless couples receiving unemployment benefits are lifted above the poverty line, but only 22 percent of couples with four or more children. In contrast, the ***family allowance***, which is targeted by the number of children, lifts 16 percent of large recipient families out of poverty, against 2.3 percent of recipient families with one child. Overall though, the family allowances have only a small effect on poverty: 6.2 percent of recipient households are lifted above the poverty line thanks to the allowance.

Social assistance, the sole income-tested component of the safety net, helps one in four recipients escape poverty. Somewhat strangely, this effect is concentrated in low-poverty groups such as pensioners and the self-employed, among whom only a very small percentage receive social assistance. This suggests that social assistance does reach the few needy households in those groups and makes a significant difference for them.

A further assessment of the social safety net's ability to help the poor can be made by showing the ***transfers received by the poor as a fraction of the poverty gap***. In total, the social transfers received by the poor are 215 percent of the (remaining) poverty gap. This means that without the transfers the poverty gap would be about 3.2 times larger. However, the transfers received by non-poor people are almost 22 times larger than the poverty gap. The unemployment benefit and the family allowances received by non-poor households would each be sufficient to more than cover the entire poverty gap. While in practice it is of course unlikely and probably undesirable that such drastic reorientation would ever take place, it does underline that there is scope in the total resource base of the safety net to reorient funds towards the poor.

Modifying the Social Safety Net

Four proposals are made to improve selectively the poverty reduction impact of social transfers other than pensions. The proposals are either budget-neutral or imply only modest increases in the total amount of transfers (which could easily be financed out of anticipated savings from proposed reforms of the pension system).

Proposal A: Income-testing the family allowance and doubling the amount for large households. This responds to the situation whereby the freezing of the nominal amount of the family allowance since mid-1992 has disproportionately hurt the poor. A one-time revision of the amount is recommended to ensure adequate coverage of a basket of children's goods and services at today's prices, after which the amount would remain constant in real terms. The proposal also aims to reduce poverty among children, which is twice the national average in Poland. Overall, the proposal would reduce poverty from 14.4 percent to 13.2 percent, but among large households the reduction would be from 43 percent to 28 percent. The proposal would also benefit farmer households and rural areas in general.

Proposal B: Reducing eligibility of family allowance to 18 years and taxing the allowance; providing income-tested day-care vouchers for young children. The first part of this proposal aims to reduce a generous eligibility criterion and to improve the progressivity of the family allowance. This would however raise poverty by about one percentage point, especially among large households and worker households. The day-care vouchers would largely compensate for this effect. They would also have beneficial indirect effects, by releasing an important current constraint, especially on mothers, to take up a job.

Proposal C: Improved income-testing of social assistance. Social assistance is currently the only income-tested component of the social safety net in Poland. Even though social assistance is better targeted than the other social safety net components, 55 percent of beneficiaries are non-poor and the amounts paid to non-poor households are actually higher than those paid to the poor. This suggests that the targeting of social assistance could be still improved by more effective income-testing. If improved income-testing reduces payments to non-poor households by 20 percent, this would permit an increase of payments to poor households by 30 percent and cover increased administration costs of the income-testing, in a budget-neutral fashion. Poverty would be reduced by about 0.3 percentage points.

Proposal D: Extending eligibility for unemployment benefits for low skilled unemployed in large households. Current eligibility for unemployment benefits is limited to 12 months in most cases. This hurts disproportionately low-skilled workers whose chances of finding a job are low in the current economic environment. The unemployment benefit could also make a larger contribution to closing the poverty gap for social income recipients households where many unemployed who have lost their benefits are concentrated, and for large households. It is proposed to extend the eligibility for unemployed whose highest education is primary or lower vocational school and who are members of large households. An extension by 12 months would increase recipients by about seven percent. It would reduce poverty by about 0.4 percent, but concentrated in current high-poverty groups.

I. Background and Objectives

1. This paper aims to answer the question how the current (1993) system of social transfers in Poland helps the poor. As a corollary, the paper will investigate whether reallocation of funds across different types of social transfers can have a greater poverty alleviation impact. The specific poverty-focus of the investigation implies that the question of internal efficiency of the social transfer system will not be addressed (this has been done in World Bank, 1993). However, the effect of social transfers on poverty is an important element of the external efficiency of the system. The scope of this paper is limited to cash transfers.[1]

2. Since the start of transition in Poland, in January 1990, the social safety net[2] has undergone important changes. The major one is the introduction of unemployment benefits, as a result of rapidly emerging unemployment. At the end of 1993, unemployment was estimated at 15 percent of the labor force. The recent changes in the social safety net and a detailed description of the current system are in World Bank (1993) and Rutkowski (1991) and need not be repeated here. For this study, we have grouped the different elements of the safety net in five categories:

(a) pensions (retirement, disability, and survivor pensions);

(b) unemployment benefits;

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1. Transfers in kind occur mainly through the provision of education and health care, and through consumer subsidies. Since transition, the relative importance of these has been decreasing steadily.

2. The terms "social safety net" and "social transfers system" are used interchangeably in this report.

(c) family allowance (including benefits for care for the elderly);

(d) other social insurance benefits (maternity, childcare and other social insurance benefits administered by the enterprises or the social insurance offices ZUS and KRUS);

(e) social assistance benefits (administered at the communal (gmina) level).

3. In 1993, social transfers accounted for 18.7 percent of GDP:

• pensions	14.9 percent of GDP
• unemployment benefits	1.9 percent of GDP
• family allowance and other social insurance	1.4 percent of GDP
• social assistance	0.5 percent of GDP

4. The cost of the social safety net has risen sharply since transition, both in absolute real terms and as a fraction of GDP. In the climate of fiscal stringency, the Government of Poland has understandably been concerned to control the growth of the social budget and to ensure that spending achieves the desired distributional objectives. Several proposals have been implemented, and others debated, to revise the social safety net in order to meet better these twin objectives.

5. In 1993, the indexation of pensions to cost-of-living increases was reduced from 100 percent to 91 percent of the amount of the pension, while at the same time the ratio of the minimum pension to the average wage was increased from 35 percent to 39 percent (and from

27 percent to 30 percent for certain disability pensions). Consideration has been given to increasing the retirement age and to tightening the eligibility criteria for disability pensions.

6. In 1993, eligibility for unemployment benefits required a stronger labor-market connection than was the case earlier (although many exemptions remained). The period over which benefits were paid was limited to 12 months, except for workers close to retirement, and in high unemployment regions. However, concern remained about the total cost of the benefits, and the efficiency of their targeting.

7. The family allowance is a general benefit, extended to all families where there is a wage-earner or self-employed person. The allowance is paid for each child up to age 16, or up to age 20 if the child is enrolled in school (except for farmer households where the family allowance is income-tested). Since the amount is not indexed, it has been falling in real terms. Proposals have been discussed to add a low-income condition to the allowance.

8. Several of these (and other) proposals have the potential of substantially altering the social safety net and its pattern of incidence. It seems useful therefore to investigate in some detail what the distributional impact is of the current system, and how it helps to alleviate poverty in Poland. This report will undertake four tasks:

(a) a brief review will be given of the profile of poverty in Poland (section 3); special attention is paid to the role of unemployment (section 4);

(b) the amount of transfers and the distribution of beneficiaries will be examined (section 5);

(c) the impact of each element of the social safety net on poverty will be estimated (section 6);

(d) a simulation of selected proposals to revise the system will be undertaken to assess their impact on poverty (section 7).

II. Data and Methodological Considerations

9. This study uses the most recent available data to assess the impact of the social safety net on the level of living of households. It is based on the ***1993 Household Budget Survey*** (January-June data), which is the first survey in Poland to cover completely the population. Prior surveys provided representative results only for the four main socio-economic groups: worker households, farmer households, mixed worker-farmer households and pensioner households. Since transition, two new socio-economic groups have emerged: households who obtain their main earnings from self-employment activities in the non-agricultural private sector (hereafter called "self-employed"), and households whose main income source is social transfers other than pensions or whose main earnings come from casual work (hereafter called "social income recipients"). The 1993 survey covers all six socio-economic groups and all results in this paper will include a breakdown by those groups (Annex 1 provides further information on the survey).

10. Next to socio-economic category, three other dimensions are important in considering the impact of social transfers: ***region, type of locality, and demographic type of household.*** Region is important because of regional price differences and because certain social problems, such as unemployment, have a strong regional concentration. In this study, regional price differences have been fully taken into account by deflating all income and expenditure figures with a regional price index, based on prices for about 200 goods and services for each voivodship (details are in Annex 2). Although for some individual items price differences of 20-30 percent or more were observed, in the aggregate no region had a price level which differed by more than two percent from the Warsaw-region (Table 1).

Table 1. Regional price index.

Region	Main city	Regional price index (reference=Central-capital region)
Central-capital	Warsaw	100.00
Central	Lodz	99.18
Central-East	Lublin	98.58
Central-West	Poznan	98.14
North	Gdansk	100.95
North-East	Bialystok	100.42
South	Katowice	100.79
South-East	Krakow	98.16
South-West	Wroclaw	102.08

11. In addition to region, the analysis will also distinguish the type of locality because the economic and social evolution may differ in urban and rural areas, and in large and small cities. Lastly, the demographic characteristics of households are important because they

influence eligibility for social transfers and determine in part the household's ability to respond to economic change.

12. An important methodological point to be addressed is ***whether to use household income or expenditure*** as basis for the analysis. Most previous work on poverty and incidence of social transfers in Poland has relied on income (see e.g. Milanovic, 1992 and Topinska, 1993). The main reason for this was the high quality of income data in Polish household surveys, e.g., all wages reported by workers were cross-checked with the firms who paid them. This practice has disappeared after transition, and there is now evidence of serious under-reporting of income especially for income from the private sector.

13. When we compare household income with expenditure in the 1993 survey (on an equivalent adult basis), reported income falls significantly short of reported expenditure for farmers, the self-employed and social income recipients (Table 2). For the self-employed reported income is barely 25 percent of reported expenditure. This situation may well improve over time as the survey methodology becomes better adapted to the new economic reality of households, but we feel that for 1993 reported expenditure is a better basis for analysis. Moreover, there are theoretical advantages to using household expenditure for poverty analysis, because it is deemed to reflect better permanent income (see e.g. Deaton and Muellbauer, 1980).

Table 2. Average household expenditure and income per equivalent adult ('000 zl. per month).

	Household expenditure per equivalent adult	Household income per equivalent adult	Income as % of expenditure
Worker	2,642.0	2,641.0	99.9%
Farmer	1,980.5	1,297.3	65.5%
Worker-farmer	2,001.4	1,889.8	94.4%
Pensioner	2,601.4	2,461.9	94.6%
Self-employed	3,057.6	777.7	25.4%
Social income recipient	1,473.0	1,090.6	74.0%
All	2,517.7	2,308.3	91.7%

14. The use of household expenditure implies of course some discontinuity with past analysis. However, it turns out that, in the aggregate, this does not make too much difference for incidence analysis. As Table 3 shows, in 1993 social transfers were 38.4 percent of household income, and 34.6 percent of household expenditure. (Differences for specific socio-economic groups are of course much larger, due to under-reporting of income.) These figures are ratio estimates, which were also used in most earlier work because the analysis was based on grouped data. Implicitly, this approach weighs all observations by the level of household income or expenditure and thus the results are more influenced by the rich than by the poor. A poverty-oriented analysis is better served with a household-level data set, which permits to use the household (or individual) as unit of analysis, and thus to give each household (or individual) the same importance. As the last column in Table 3 shows, switching from a ratio-estimate to one based on household shares greatly increases the percent of expenditure accounted for by social transfers, from 35 percent to 45 percent. This is to be expected because the share of transfers is much higher for poorer households.

Table 3. Social transfers as percentage of income vs. expenditure (all households).

	Percent of income (ratio estimate)	Percent of expenditure (ratio estimate)	Percent of expenditure (average of household shares)
Worker	14.9	14.9	16.9
Farmer	37.2	24.3	27.3
Worker-farmer	26.9	25.9	26.9
Pensioner	87.9	83.6	91.0
Self-employed	38.6	9.4	12.0
Social benefit recipients	73.6	50.8	56.7
All	38.4	34.6	44.9

Note: The ratio estimate is the ratio of the sum of all social transfers (ST) over the sum of household expenditure (E) or income:

$$\frac{\sum_{i=1}^{N} ST_i}{\sum_{i=1}^{N} E_i}$$

where i denotes households (i=1,..N). For the average of household shares, the share of transfers in household expenditure is calculated for each household and then the average of those shares is taken over all households:

$$\frac{\sum_{i=1}^{N} \frac{ST_i}{E_i}}{N}$$

15. In summary, this study will be based on household expenditure. Household composition has been taken into account by expressing expenditure on a per equivalent adult basis. We have applied the OECD-scale, which is widely used in Poland (first adult = 1; other adults = 0.7; children less than 14 years = 0.5). All monetary figures (income, expenditure, social transfers) have been expressed in June 1993 prices and have been deflated with the regional price index (see Annex 2).

III. Poverty Profile

16. Prior to transition, most poverty analysis classified people as poor when their income fell below the *soc:'il minimum* calculated by the Institute of Labor and Social Affairs (Milanovic, 1992). Based on that benchmark, poverty incidence fluctuated between 10 percent and 20 percent for most of the eighties. In recent years, the social minimum has lost much of its relevance, since the method of calculation was not adapted to the new economic trends. In 1993, 55 percent of the Polish population had an expenditure level below the social minimum (which in June 1993 was 2,110,000 zl. per month - i.e., $122 at the then prevailing exchange rate of $1 = 17,352 zl.). This makes it no longer useful as a criterion to identify people in poverty. At the timw of writing, the Institute of Labor and Social Affairs was in the process of developing a new method of calculating the social minimum.

17. We have therefore used two other "minima" to identify the poor: ***the minimum wage and the minimum pension***. The former is based on the actual expenditure of the poorest 20 percent of households (to which several adjustments are made) and has thus an implicit meaning for poverty analysis.[3] In June 1993, the minimum wage was 1,500,000 zl. ($86) per month and 26.3 percent of Polish people had an expenditure level below it. The minimum pension is determined as a percentage of average wages, in order to ensure that a minimum living standard

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3. The minimum wage calculation starts from the expenditure of the poorest 20 percent of households, excluding expenditure on alcohol and tobacco and on certain services such as adult education, which is adjusted for inflation with the consumer price index. Adjusted expenditure are then multiplied with the average wage share in household income and with the average number of dependents in the poorest 20 percent of worker households.

is maintained for pensioners. In June 1993, it was 1,231,300 zl. per month ($71). At that time, this corresponded to 35 percent of average wage (the ratio has since been raised to 39 percent), and 14.4 percent of the population had an expenditure level lower than the minimum pension. This sharply lower percentage relative to the population below the minimum wage, indicates a significant bunching of the population distribution between the two minima. In this range, the estimate of poverty incidence is thus fairly sensitive to the selection of the poverty line. On average, each increase of the poverty line by 10,000 zl. will increase the poverty incidence by 0.44 percentage points. However, the concentration of people between the minimum pension and minimum wage also implies that poverty in Poland (as defined by the minimum wage) is not very deep.

18. In the rest of this section, we look at the incidence of poverty and the distribution of the poor along the main socio-economic, regional, and demographic characteristics of the population.

19. ***Poverty incidence*** (the percentage of people below the poverty line) varies much across the different ***socio-economic groups*** (Table 4). It is highest among the social income recipients and lowest among the self-employed. These two new socio-economic groups can be seen as containing the people who, respectively, have failed and succeeded to adjust to economic transition. The fact that the two extremes in poverty incidence occur in the two new post-transition groups, is one indication that transition has widened the distribution of the level of living, extending it both at the lower and upper end. The second lowest poverty incidence occurs

among pensioners and workers: in each group, about 11 percent have a level of living below the minimum pension and another 10 percent are between the two minima. For pensioners, these are fairly low figures and indicate that the pension system in Poland is quite effective in ensuring pensioners a minimum standard of living. This is an important reversal from the situation in the eighties, when pensioners consistently had the highest poverty figures (Milanovic, 1992). In 1993, farmers have the highest poverty incidence (23 percent) among groups with an active connection to the labor market, followed by the mixed households (19 percent). The situation of mixed households is also a reversal relative to the pre-transition period, when they usually had the lowest poverty incidence.

Table 4. Poverty incidence and poverty gap by socio-economic group.

	Below minimum pension (1,231,300 zl.)		Below minimum wage (1,500,000 zl.)	
	Poverty Incidence	Poverty gap	Poverty incidence	Poverty gap
Worker	11.0	11.8	21.6	14.3
Farmer	23.3	13.7	38.6	16.8
Worker-farmer	19.0	10.0	38.2	13.4
Pensioner	10.9	13.8	21.2	16.0
Self-employed	9.0	11.1	18.4	13.5
Social income recipient	55.9	17.9	71.3	23.0
All	14.4	13.2	26.3	15.6

Note: Poverty incidence is the percentage of people below the poverty line; poverty gap is the average shortfall of household expenditure per equivalent adult as percentage of the poverty line.

20. The *poverty gap* (the average shortfall of household expenditures relative to the poverty line) is quite low in Poland: 15.6 percent of the minimum wage and 13.2 percent of the

minimum pension[4] (Table 4). This means that the average person with a level of living below the minimum wage has a shortfall of about 234,000 zl. per month ($13.5), and the average person below the minimum pension has a shortfall of about 160,000 zl. ($9). It is also quite remarkable that the variation of the poverty gap across socio-economic groups is very slight. Excluding the social income recipients, the poverty gap ranges only between 13 percent and 17 percent of the minimum wage, and 10 percent and 14 percent of the minimum pension. There is thus no one group in Poland which falls significantly behind others. The exception of course are the social income recipients. Although they constitute only between three and four percent of the population, they constitute 13 percent of all poor. Their poverty is also much deeper, with a poverty gap of 18 percent of the minimum pension and 23 percent of the minimum wage. This means that the average expenditure per equivalent adult in poor social income recipient households lies only between 1,000,000 and 1,266,000 zl. per month ($58-73). While, by definition, this group is covered by the social safety net, the transfers they now receive are inadequate to give them a level of living in line with the other groups, and even in line with other poor. Section 4 will examine in detail the transfers they receive and the contribution each transfer makes.

21. The fact that the poverty gap is fairly small and even across socio-economic groups indicates that the social safety net in Poland functions well enough to prevent any one group

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4. This poverty gap is very low by international standards, although not unusually low for Eastern Europe (e.g. in Hungary it is estimated at 17 percent for a poverty line equal to half GNP/capita). Most West-European countries have poverty gaps in the 30-40 percent range. In countries with high inequality, such as Brazil, the poverty gap can exceed 50 percent.

from falling very much below the poverty line regardless of the cause of poverty. This is also very important for further targeting of poverty alleviation measures. In essence, the even poverty gap means that resources can be targeted mainly on the basis of differences in poverty incidence, even if the objective is to reduce *both* poverty incidence and the severity of poverty. In contrast, in a situation where the poverty gap varies across socio-economic groups, it can be shown that resources should be targeted according to the product of the poverty incidence ratio and the poverty gap ratio (see e.g. Grootaert and Kanbur, 1990, and Kanbur, 1987). The latter situation is of course relevant for the social income recipients households, who should receive a larger share of resources than suggested by the poverty incidence only, in view of their larger poverty gap.

22. In order to assess the amount of resources needed to alleviate poverty, one needs to combine poverty incidence with the absolute size of each socio-economic group and with the poverty gap. Since workers and pensioners are the two largest groups in Poland, they make up over 50 percent of all poor, even though they have a low poverty incidence (Table 5). Any attempt to help the poor in those groups will thus have to rely on means-testing, since targeting based only on the socio-economic criterion will lead to high leakage of resources to the non-poor.

Table 5. Distribution of the poor by socio-economic group.

	Below minimum pension (1,231,300 zl.)	Below minimum wage (1,500,000 zl.)	Share of each socio-economic group in total population
Worker	37.9%	40.7%	49.4%
Farmer	17.1%	15.6%	10.6%
Worker-farmer	11.5%	12.7%	8.7%
Pensioner	16.9%	18.1%	22.4%
Self-employed	3.5%	3.9%	5.6%
Social income recipient	13.0%	9.1%	3.3%
Total	100.0%	100.0%	100.0%

23. The ***regional variation*** in poverty incidence (Table 6) is less pronounced than across socio-economic groups. The Warsaw-region has the lowest poverty incidence, followed by the South. The highest poverty incidence is in the South-East and Central-West. Together those two regions comprise 30 percent of all poor. In the South-East poverty is especially concentrated among farmers and social income recipients. The poverty gap varies very little across regions, confirming that no one region as a whole constitutes an area of severe poverty. This finding is perhaps surprising given that different regions in Poland have been affected very differently by economic transition. This could well be a testimony to the well-functioning of the safety net, which, especially through unemployment benefits and pensions, has been able to compensate people to a large degree for the costs of transition, and has effectively prevented that a large number of them fall into poverty.

Table 6. Poverty incidence and poverty gap by region

	Below minimum pension (1,231,300 zl.)		Below minimum wage (1,500,000 zl.)	
	Poverty Incidence	Poverty gap	Poverty incidence	Poverty gap
Central-capital	9.6	12.5	18.9	14.8
Central	11.2	13.4	23.7	14.4
Central-East	16.5	12.7	30.7	15.3
Central-West	17.0	12.9	29.4	16.0
North	14.1	14.2	26.3	16.0
North-East	15.3	13.1	28.2	15.3
South	10.9	13.8	19.4	16.0
South-East	18.4	13.0	33.1	15.7
South-West	16.8	14.3	29.6	16.6
All	14.4	13.2	26.3	15.6

Note: Poverty incidence is the percentage of people below the poverty line; poverty gap is the average shortfall of household expenditure per equivalent adult as percentage of the poverty line.

Table 7. Distribution of the poor by region.

	Below minimum pension (1,231,300 zl.)	Below minimum wage (1,500,000 zl.)	Share of each region in total population
Central-capital	7.9%	8.5%	11.8%
Central	6.6%	7.7%	8.5%
Central-East	6.5%	6.6%	5.7%
Central-West	17.4%	16.5%	14.7%
North	9.7%	9.9%	9.9%
North-East	6.4%	6.5%	6.0%
South	13.1%	12.8%	17.3%
South-East	20.2%	19.9%	15.8%
South-West	12.1%	11.7%	10.4%
All	100.0%	100.0%	100.0%

24. All this does not mean that there are no voivodships which are significantly worse off (or better off) than the region to which they belong. Although the 1993 budget survey does not

provide representative data at the voivodship level, the data do show significant variation in poverty incidence within certain regions:

- The Central-capital region has the lowest poverty incidence at 9.6 percent, but voivodship Ostroleckie has a poverty incidence twice as high, especially among farmers; similarly, in the Central region, with an overall poverty incidence at 11.2 percent, voivodship Sieradzkie shows a very high percentage of poor social income recipients;

- the Central-East region incudes relatively well-off voivodship Chelmskie, but it also includes voivodships Bialskopodlaskie and Zamojskie which are among the poorest in the country;

- the low-poverty South region contains voivodship Bielskie where about one in four people are poor;

- while it is one of the poorer regions, the South-West contains voivodships Walbrzyskie and Wroclawskie (both of which border the South region) with a poverty level only about half that of the region as a whole.

25. There is a further ***spatial dimension*** to poverty: poverty incidence is much higher in villages and in small cities than in large cities (Table 8). In large cities (more than 200,000

inhabitants), only 5.5 percent of people live below the minimum pension. This percentage uniformly rises with smaller city size, and reaches 22 percent in villages. A similar pattern exists relative to the minimum wage. Once again though, the poverty gap is remarkably even. Even though the poverty rate in villages is more than three times what it is in large cities, the poverty gap is a mere four percentage points higher.

Table 8. Poverty incidence and poverty gap by type of locality.

	Below minimum pension (1,231,300 zl.)		Below minimum wage (1,500,000 zl.)		Share in total population
Cities	Poverty Incidence	Poverty gap	Poverty incidence	Poverty gap	
>200,000 inhabitants	5.5	12.7	12.3	13.0	21.7%
100-200,000 inhabitants	7.9	15.2	16.3	15.3	8.4%
20-100,000 inhabitants	11.4	13.2	21.6	15.7	18.7%
<20,000 inhabitants	14.2	12.7	27.1	15.5	12.3%
Villages	22.1	13.1	38.1	16.3	38.9%
All	14.4	13.2	26.3	15.6	100.0%

Note: Poverty incidence is the percentage of people below the poverty line; poverty gap is the average shortfall of household expenditure per equivalent adult as percentage of the poverty line.

26. *Demographic characteristics* are important indicators of poverty in Poland. This is especially the case for type of household (Table 9). Only 3.4 percent of childless couples live below the minimum pension level - many of these households are pensioners. The poverty incidence rises steadily with the number of children. Among households with four or more children, 42.6 percent have an expenditure level per equivalent adult below the minimum pension, and 60.8 percent fall below the minimum wage. One corollary of these observations

Table 9. Poverty incidence and poverty gap by type of household and gender.

	Below minimum pension (1,231,300 zl.)		Below minimum wage (1,500,000 zl.)		Share in population
	Poverty Incidence	Poverty gap	Poverty incidence	Poverty gap	
Couple	3.4	11.7	9.0	13.3	11.6%
Couple +1 child	6.1	13.1	14.6	13.7	10.8%
Couple +2 children	11.7	11.1	23.1	14.3	20.8%
Couple +3 children	22.9	12.7	40.0	15.3	9.0%
Couple +4 or more children	42.6	14.8	60.8	18.4	5.0%
Father + children	9.7	18.6	15.4	20.8	0.3%
Mother + children	16.4	14.6	28.5	17.2	3.2%
Other	15.6	13.5	28.6	16.1	39.4%
Male-headed households	14.0	12.9	26.3	15.2	72.9%
Female-headed households	15.3	13.7	26.1	16.9	27.1%
Males	14.6	13.7	26.9	16.0	47.9%
Females	14.1	12.8	25.7	15.2	52.1%
All	14.4	13.2	26.3	15.6	100.0%

Note: Poverty incidence is the percentage of people below the poverty line; poverty gap is the average shortfall of household expenditure per equivalent adult as percentage of the poverty line.

is that ***poverty among children*** in Poland is high; one in five children lives in a household with an expenditure level below the minimum pension (Table 10). In contrast, the ***poverty rate among elderly people*** (60+ years of age) is only 7.6 percent - one half the national average (Table 10). The strong correlation between poverty and presence of children in the household, makes the presence of children an important candidate for the targeting of social transfers. Currently, only the family allowance and maternity care are based on this criterion. By the same token, the social safety net seems quite effective at protecting elderly people against poverty and further old-age-based interventions do not appear warranted at this time.

Table 10. Poverty among children and elderly.

	Percent living in poor households (Below minimum pension - 1,231,300 zl.)	
	Children	Elderly (60+)
Worker	14.5	5.1
Farmer	27.5	18.7
Worker-farmer	21.8	14.0
Pensioner	33.1	5.5
Self-employed	10.8	7.3
Social income recipient	60.0	43.1
All	20.3	7.6
All households	14.4	14.4

27. At first sight, there does not appear to be an important ***gender dimension*** to poverty in Poland (Table 9). Poverty incidence among men and women is almost the same, and this is also the case among male-headed and female-headed households. (This could well be because in the survey data the main earner in the household is automatically classified as the head of household.) However, among single-parent households, the poverty incidence is higher for mothers with children than for fathers with children. (This comparison has to be treated with caution since there are very few cases of fathers with children in the sample.) These aggregate figures could of course hide many different situations faced by women with respect to access to the labor market or extent of coverage by the social safety net. Nead (1994) contains an in-depth inquiry of the gender dimension of poverty, and Vial (1994) focuses on the social assistance aspects.

28. We close this brief overview of the poverty profile in Poland, by looking at the ***link between education and poverty***. There is a strong inverse relation between poverty and the education of the head of household (Table 11). Post-secondary education virtually guarantees a level of living above the poverty line. Even in households where the head has completed general secondary education, the poverty rate is only 7.8 percent. But poverty incidence is twice as high or more if the head only has vocational or elementary education. This is an important observation because almost two thirds of the Polish population lives in households where the head has only vocational or elementary education.

Table 11. Poverty and education.

	Below minimum pension (1,231,300 zl.)		Share in total population
Education of head of household	Poverty incidence	Poverty gap	
Elementary	22.1	14.3	28.6%
Vocational	16.6	12.4	35.3%
Secondary	7.8	12.6	25.4%
Higher	2.0	10.2	10.6%
All	14.4	13.2	100.0%

Note: Poverty incidence is the percentage of people below the poverty line; poverty gap is the average shortfall of household expenditure per equivalent adult as percentage of the poverty line.

29. ***We can summarize the poverty profile in Poland as follows.*** Poverty in Poland has a strong socio-economic, locational, and demographic dimension. Poverty rates are low among workers, pensioners, the elderly in general, among the educated, and in large cities. Poverty is high among farmers, in rural areas in general, among workers with low education, and among households with many children. Since transition, two new socio-economic groups have emerged:

a successful class of self-employed people, with the highest expenditure level and the lowest poverty of any group, and a class of households who must rely on the non-pension part of the social safety net as main source of income, and of whom more than half live in poverty.

30. The poverty gap is not very large in Poland and is extremely even across all groups and regions. This points at a significant degree of success of the social safety net in preventing pockets of deep poverty. (The sole exception is the new group of social income recipients.) However, there remains scope for improved targeting of the different components of the social safety net.

IV. Poverty and Unemployment

31. *Unemployment* is perhaps the most visible social ill resulting from transition – it affected over 15 percent of the labor force in 1993. Unemployment is a major cause of poverty in Poland. The poverty rate among households where there is at least one unemployed person is 27.8 percent – almost twice the national average (Table 12). The impact is especially sharp among worker and pensioner households. The impact is also disproportionately felt by blue collar workers, who make up almost 60 percent of all unemployed, and by those with low levels of education (Table 13).

Table 12. Poverty and unemployment.

	Below minimum pension (1,231,300 zl.)			
	Households with one or more unemployed members		All households	
	Poverty Incidence	Poverty gap	Poverty incidence	Poverty gap
Worker	20.4	12.7	11.0	11.8
Farmer	29.7	12.5	23.3	13.7
Worker-farmer	26.1	12.6	19.0	10.0
Pensioner	27.4	15.3	10.9	13.8
Self-employed	14.5	9.0	9.0	11.1
Social income recipient	56.7	17.1	55.9	17.9
All	27.8	14.4	14.4	13.2

Note: Poverty incidence is the percentage of people below the poverty line; poverty gap is the average shortfall of household expenditure per equivalent adult as percentage of the poverty line.

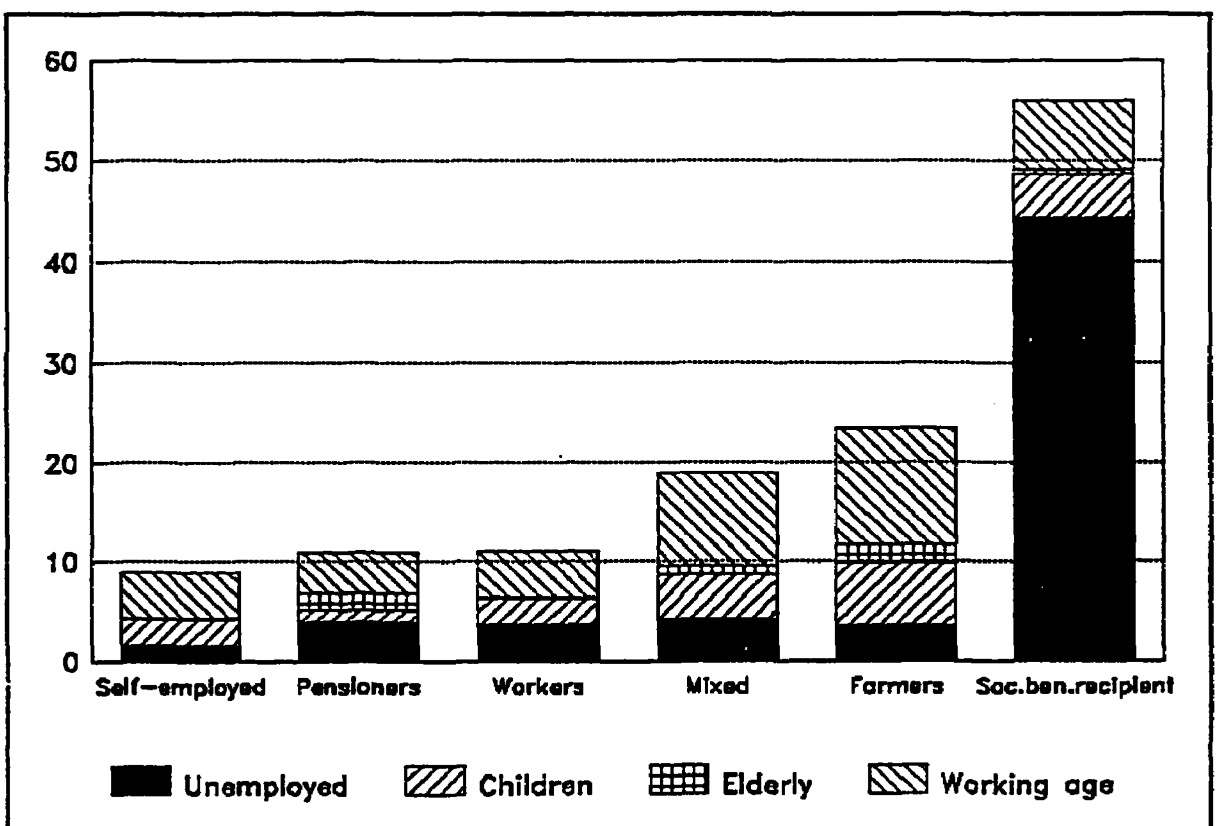
Table 13. Characteristics of the unemployed (3rd quarter 1993).

	Percentage of all unemployed
Women	53.3
Men	46.7
Blue collar workers	58.9
White collar workers	16.9
Recent graduates	8.3
Other	15.0
With university diploma	1.9
With secondary vocational diploma	21.0
With secondary diploma	7.2
With primary vocational diploma	39.0
With primary diploma	30.9
15-17 years	0.7
18-24 years	35.3
25-34 years	28.1
35-44 years	24.5
45-54 years	9.5
55+ years	1.9

Source. Ministry of Labor statistics.

32. The extent to which unemployment contributes to poverty differs for each ***socio-economic group*** (Figure 1). For each of the four traditional groups, the unemployed represent a poverty incidence of about four percentage points. This corresponds of course to very different relative shares: for worker and pensioner households, poverty due to unemployment is over one third of all poverty, while for farmers it is only 15 percent. In contrast, poverty among children is a much greater contributing factor for farmer and mixed households than in other groups. The situation of the two post-transition socio-economic groups presents two extremes. For the self-employed, unemployment is a minor cause of poverty, while for the social income recipients unemployment is a cause for 80 percent of all poor.

Figure 1. Structure of poverty by socio-economic group (poverty incidence %).



33. In Figure 2, ***regions*** are ordered by incidence of poverty. For the five regions with the lowest poverty incidence (Central-Capital, South, Central, North, and North-East), the differences in poverty are almost entirely explained by differences in poverty due to unemployment. In the Warsaw-region, poverty due to unemployment is 24 percent of the total, while in the North-East it is 50 percent. These differences are partly but not entirely explained by differences in the unemployment rate (see Table 14). The situation is different in the Central-East and Central-West regions who each have an unusually large share of poverty among children and a low share of poverty due to unemployment. In the remaining two

Figure 2. Structure of poverty by region (poverty incidence %).

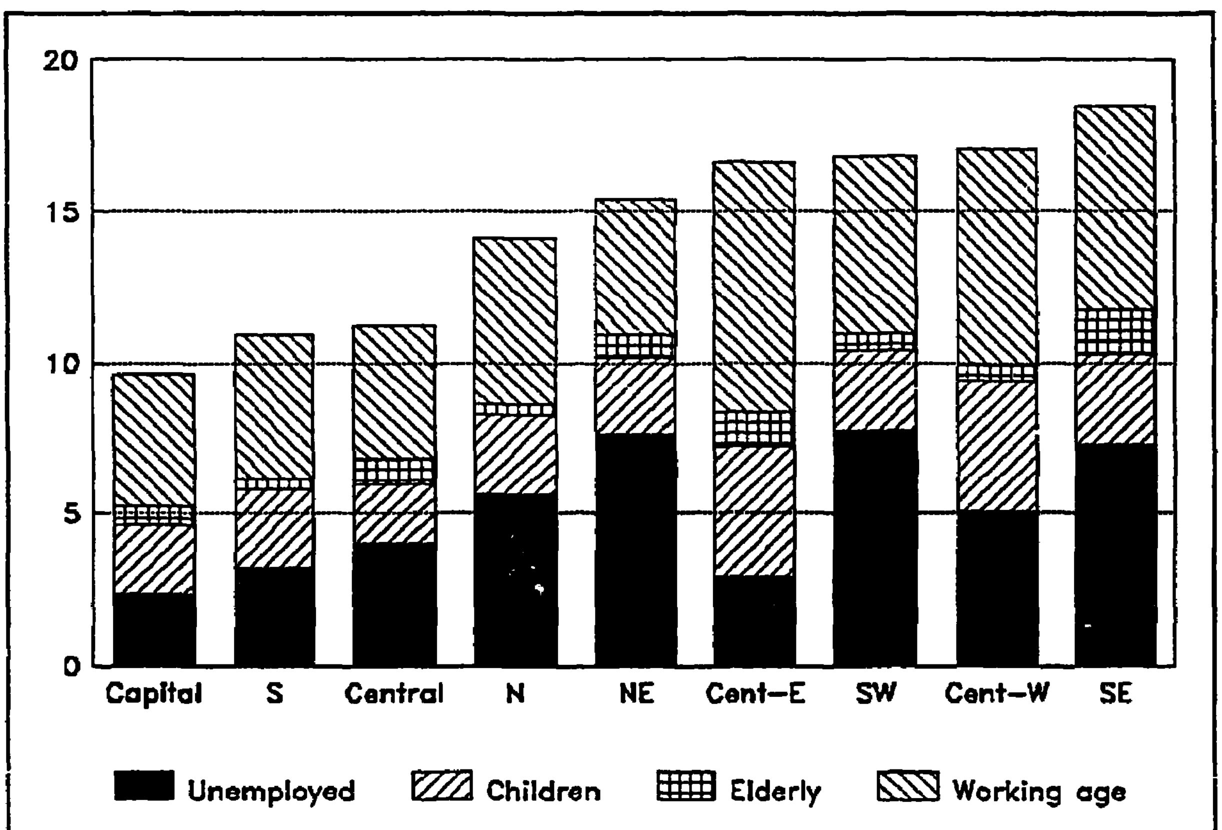


Table 14. Regional distribution of unemployment.

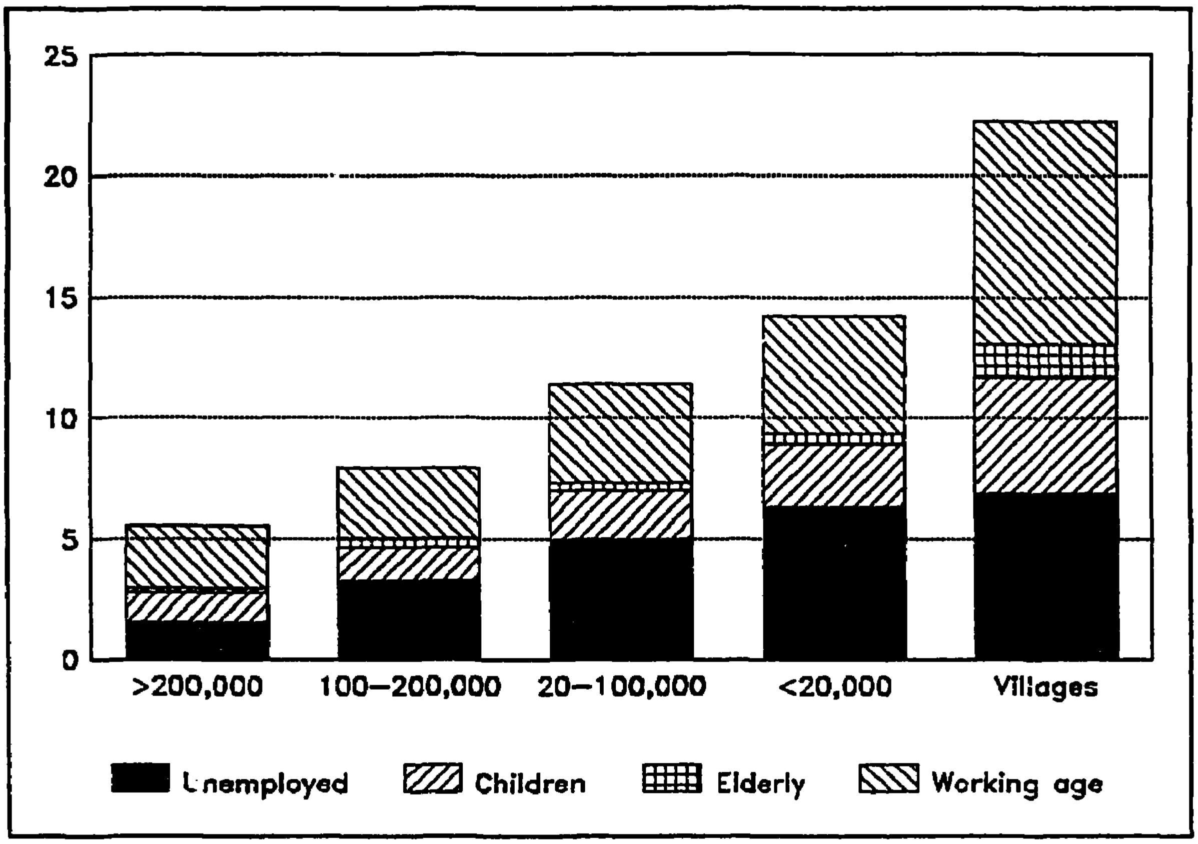
	Share of population	Share of poor	Share of unemployed	Unemployment rate	Unemployment rate (registered only)	Poverty incidence among households with unemployed person
Central-capital	11.8%	7.9%	8.3%	8.7%	8.5%	18.2%
Central	8.5%	6.6%	11.1%	15.4%	15.1%	19.1%
Central-East	5.7%	6.5%	4.1%	9.5%	9.0%	22.0%
Central-West	14.7%	17.4%	13.8%	12.3%	11.8%	29.4%
North	9.9%	9.7%	11.7%	15.5%	14.9%	27.3%
North-East	6.0%	6.4%	8.6%	18.9%	18.6%	29.4%
South	17.3%	13.1%	11.2%	8.8%	8.2%	28.0%
South-East	15.8%	20.2%	16.5%	13.4%	12.5%	33.2%
South-West	10.4%	12.1%	14.6%	18.9%	17.9%	31.8%
Total	100.0%	100.0%	100.0%	13.0%	12.4%*	27.8%

*This unemployment rate is slightly lower than the "official" figure. This is due to sampling errors in the survey results and minor definitional differences.

regions, South-West and South-East, poverty due to unemployment is at about the same level as in the North-East. The main difference is that the South-East has a very high share of poverty among the elderly. Both regions have a very high poverty incidence among the unemployed, but only the South-West has high unemployment (in fact, the highest in the country - Table 14).

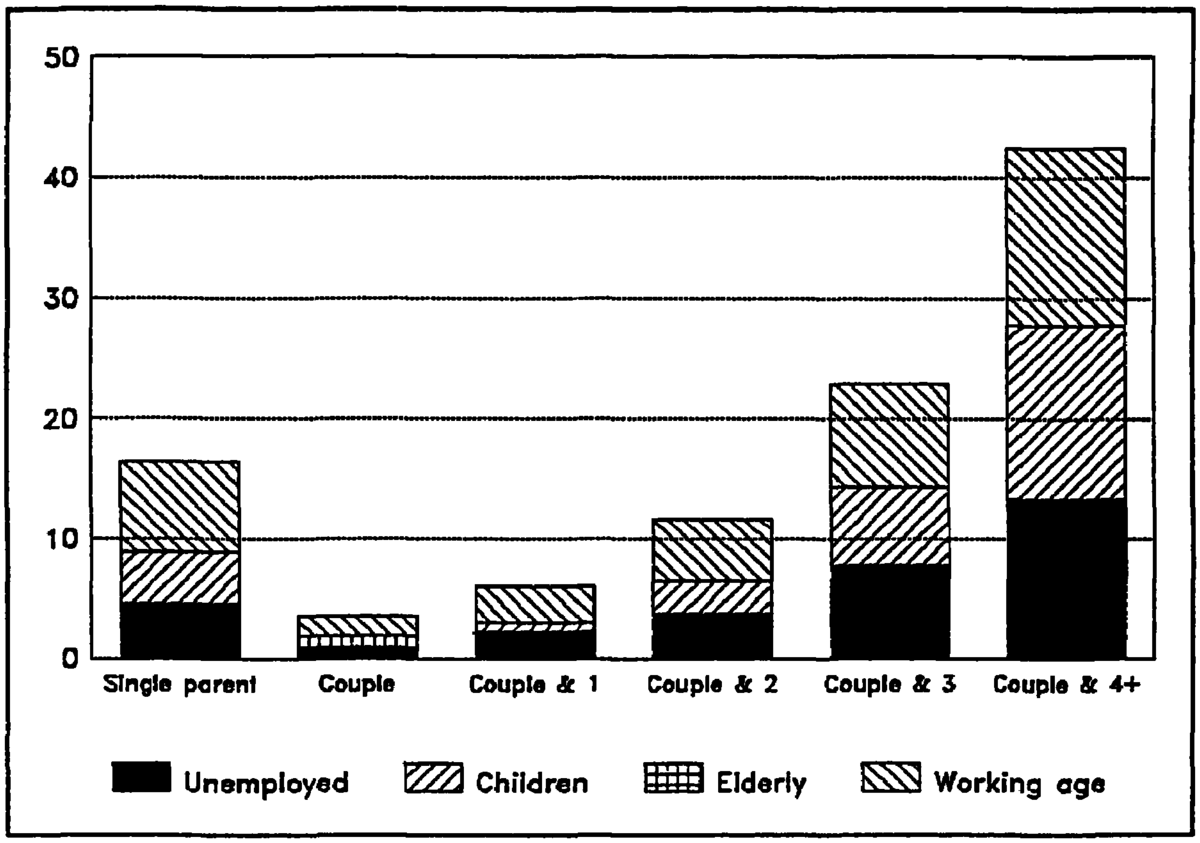
34. With respect to *type of locality*, the relative role of unemployment in explaining poverty is least in big cities and villages: in each, about 30 percent of the poor are in households with an unemployed member (Figure 3). In the three intermediate city sizes, the figure is just over 40 percent. In villages, the poverty among children and the elderly is a much larger proportion of total poverty (22 percent and six percent, respectively) than elsewhere.

Figure 3. Structure of poverty by locality (poverty incidence %).



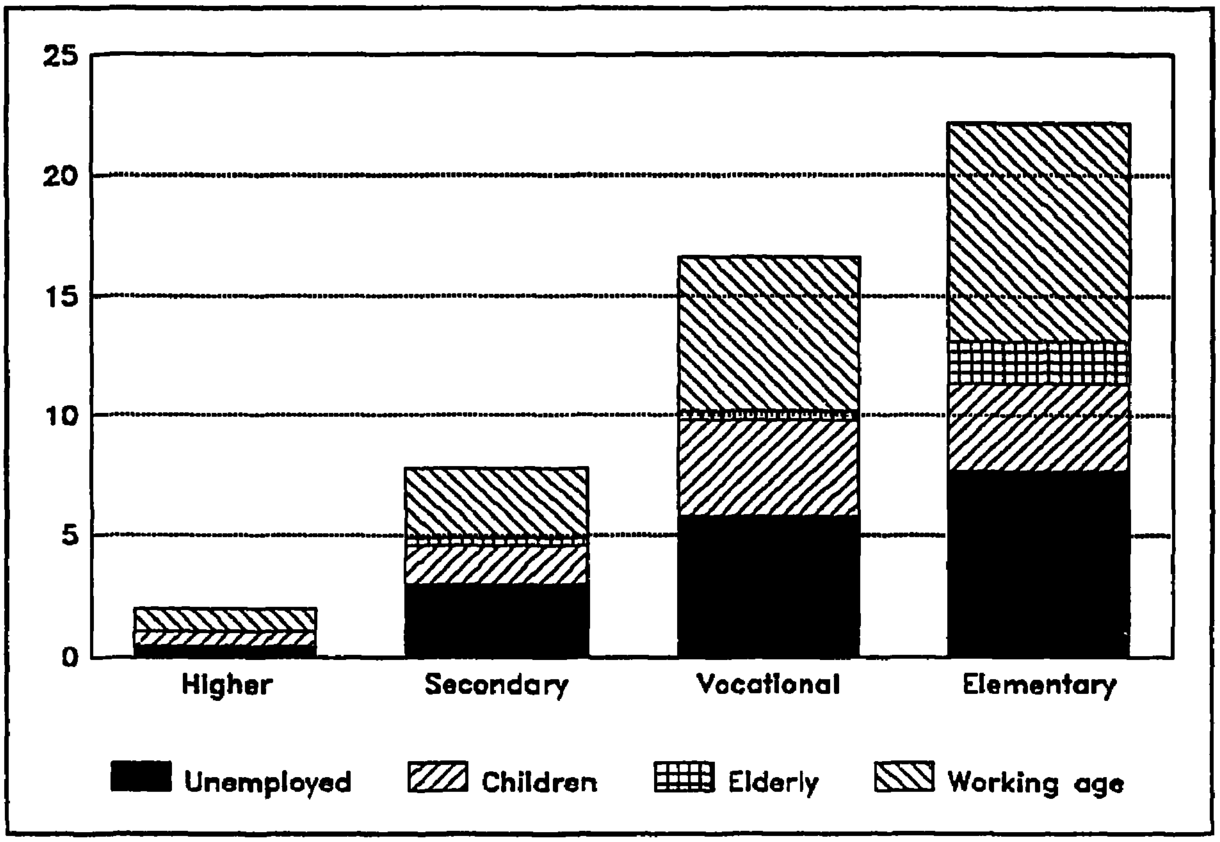
35. As we saw in the previous section, the sharpest increases in poverty incidence are observed when household are ranked according to the ***number of children*** or according to the education level of the head of household. The relative importance of unemployment as a contributing factor to poverty, does not however differ much by household size – it is steady at around one third (Figure 4). Obviously, poverty among children rises with household size and this explains most of the variation in total poverty incidence across household sizes.

Figure 4. Structure of poverty by type of household (poverty incidence %).



36. The relative importance of unemployment as a determinant of poverty is also fairly steady across households classified by the ***level of education of the household head***: it contributes 35 percent to poverty in households where the head has elementary or vocational education, and 39 percent where the head has secondary education (the figure is lower, 23 percent for heads with higher education, but poverty incidence among such households is very low). The share of children in poverty is markedly lower among households where the head only has elementary education and the share of the elderly markedly higher (Figure 5).

Figure 5. Structure of poverty by education of household head (poverty incidence %).



37. *In summary*, unemployment is a major cause of poverty in Poland. Over one third of all poor live in households where there is an unemployed member, and the poverty incidence among people in such households is almost twice the national average. The link between poverty and unemployment varies across socio-economic groups and regions. The link is strongest in worker and pensioner households, and in social income recipients households, where 80 percent of poverty is linked to unemployment. However, it is the regional structure of poverty which has the most pronounced link with unemployment. In the five regions with the lowest poverty incidence, the structure of poverty is virtually the same, save for poverty due to unemployment.

In the other four regions, differences in poverty among children and the elderly explain most of the differences in total poverty.

38. The strong link between poverty and unemployment indicates that pro-active labor market policies aimed at employment creation need to be an important ingredient of poverty alleviation policy in Poland. These can run the entire gamut from improved employment offices to public works, credit-support to small enterprises, and, of course, training and re-training (see Rutkowski, 1994 for details). Where these policies are geared in the first place to providing work to the unemployed, they will have the most immediate poverty alleviation impact. However, the link between poverty and education suggests that improved training and education deserves an important role in poverty alleviation for the medium longer term. (It is outside the mandate of this paper to develop concrete policy suggestions in this area.)

V. The Beneficiaries of the Social Safety Net

39. For this study we have distinguished ***five components of the social safety net***: pensions, unemployment benefits, family allowances, other social insurance, and social assistance (see section 1). Each of those has a set of specific objectives and attempts to reach different households. It is not surprising therefore that the percentage of households receiving a given transfer varies widely across the socio-economic groups (Table 15). All pensioner households of course receive ***pensions***, but so do over 50 percent of farmer and mixed households and about one fourth of worker households. The receipt of pensions in non-pensioner

households arises because of the possibility of retirement by one household member while the main earner continues to work.

Table 15. Recipients of social transfers.

	Percent of households receiving				
	Pension	Unemploy. benefit	Family Allowance	Other social insurance	Social assistance
Households below minimum pension	40.9	19.2	64.1	7.1	9.6
Households between minimum pension and minimum wage	49.6	15.8	61.5	5.6	6.0
Households above minimum wage	54.9	7.2	46.6	2.5	2.5
Worker	23.5	9.9	71.1	4.0	3.2
Farmer	51.4	8.3	28.0	3.1	2.7
Worker-farmer	53.8	9.5	67.1	6.6	2.7
Pensioner	99.9	4.7	23.2	1.0	2.3
Self-employed	19.2	6.1	61.6	3.1	0.8
Social income recipient	3.9	56.6	56.3	12.1	29.2
Central-capital	50.2	6.5	41.7	2.5	2.8
Central	51.9	11.5	45.3	4.0	4.9
Central-East	57.0	6.4	45.3	2.7	3.7
Central-West	52.2	9.6	53.8	4.0	4.0
North	46.2	11.9	53.6	3.2	3.5
North-East	55.1	13.5	49.2	3.7	4.5
South	50.1	6.0	51.9	2.4	2.9
South-East	61.8	9.4	52.8	3.7	3.3
South-West	54.0	12.7	50.8	3.6	3.7
City					
>200,000 inhabitants	50.3	5.7	47.2	2.7	3.6
100-200,000 inhabitants	48.6	7.6	50.5	2.9	3.2
20-100,000 inhabitants	47.9	9.4	54.7	2.6	3.7
<20,000 inhabitants	53.5	12.5	54.0	3.0	3.4
Villages	58.9	11.6	47.5	4.3	3.7
Couple	73.3	3.1	12.8	0.3	0.9
Couple +1 child	23.1	9.2	82.6	4.2	2.9
Couple +2 children	10.7	10.0	90.5	4.9	2.4
Couple +3 children	11.8	12.2	88.1	6.7	4.8
Couple +4 or more children	10.0	13.2	88.5	9.7	9.7
Father + children	50.7	7.5	52.3	0.0	9.2
Mother + children	35.1	6.7	77.8	4.1	16.3
Other	75.9	11.4	31.7	2.8	3.7
All	52.9	9.3	49.9	3.3	3.6

40. The second most commonly received social transfer, by 50 percent of households, is the *family allowance* (including allowance for elderly care). Around two thirds of worker, mixed, and self-employed households receive it. Effective coverage of households with children is very good, reaching almost 90 percent. Coverage however is lower in single-parent households with children (about 75 percent). In farmer households coverage is only 28 percent because the family allowance is income-tested for these households. *Other forms of social insurance* (mainly maternity and childcare benefits) are only received by 3.3 percent of households.

41. *Unemployment benefits* are received by 9.3 percent of households, fairly evenly distributed over the three main socio-economic groups. However, 56.6 percent of social income recipient households receive unemployment benefits. This is actually a low percentage, since over 70 percent of all households in this category contain an unemployed person. This indicates a concentration of unemployed who no longer receive benefits in this group. Unemployment benefits are received to a significantly higher degree in small cities and villages (where indeed 55 percent of the unemployed are located).

42. Lastly, *social assistance* is received by 3.6 percent of all households. It is received fairly equally by the different socio-economic groups, except for the two post-transition groups. Less than one percent of self-employed households benefit from social assistance but 29 percent of social income recipient households receive it. There are virtually no differences by city-size and only minor regional differences. The lowest percentage of households receiving social

assistance is in the Central-Capital region and the South-East – the two least-poor regions in Poland. Social assistance is granted according to both an income-criterion and a criterion of dysfunction in the household. This is reflected in the beneficiary percentages by household type: the incidence of receipt of social assistance rises with number of children in the households (in the same ways as does the incidence of poverty) and is highest in single-parent households.

43. ***How well targeted are these social transfers to the poor?*** Forty-one percent of households below the minimum pension receive a ***pension***, against 55 percent of households above the minimum wage. The average pension received by poor households is 1,851,900 zl. per month (Table 16), which is well above the minimum pension and the minimum wage, but this amount contributes of course to the expenditure of the entire household and is not sufficient to raise every recipient households above the poverty line on a per equivalent adult basis. In contrast, the average pension received by the non-poor is 3,080,900 zl. Thus, a higher percentage of non-poor receive pensions, and the amount they receive is also larger. The concentration coefficient of pensions is +0.21, which is only slightly less than the Gini-coefficient of household expenditure (0.26) and which indicates that pensions contribute only a little to equalizing the distribution of the standard of living.

Table 16. Average amount of social transfers ('000 zl. per month) received by recipient households.

	Pension	Unemploy. benefit	Family Allowance	Other social insurance	Social assistance
Households below minimum pension	1,851.9	1,403.6	498.3	860.7	914.2
Households between minimum pension and minimum wage	2,159.8	1.290.4	425.9	920.6	933.0
Households above minimum wage	3,080.9	1.315.1	347.9	1,341.9	952.8
Worker	2,105.1	1,290.7	363.9	1,062.4	890.7
Farmer	2,008.4	1,329.6	501.7	1,281.6	694.4
Worker-farmer	2,103.0	1,297.5	455.5	1,417.7	765.1
Pensioner	3,337.4	1,246.5	345.5	1,557.5	908.8
Self-employed	2,107.5	1,218.6	378.8	1,051.0	680.7
Social income recipient	1,234.2	1,520.8	434.6	972.5	1,128.2
Central-capital	2,968.6	1,304.1	362.1	1,189.0	1,126.7
Central	2,794.6	1,419.5	343.1	1,212.6	982.7
Central-East	2,702.1	1,282.3	429.1	1,211.0	975.9
Central-West	2,786.7	1,383.5	394.1	1,367.9	995.5
North	2,844.9	1,385.3	373.5	1,262.4	981.3
North-East	2,632.0	1,412.9	392.9	1,146.2	894.9
South	3,278.3	1,206.1	356.3	984.6	835.1
South-East	2,747.6	1,264.8	411.5	1,046.4	934.6
South-West	2,932.1	1,305.6	361.5	1,049.3	757.4
All	2,894.6	1,330.0	377.8	1,160.1	938.6

44. ***Unemployment benefits*** are much more targeted to the poor: 19.2 percent of poor households receive them, against only 7.2 percent of non-poor households. The average monthly benefit is 1,330,000 zl. and does not differ by income-level of the recipient. This means that on balance unemployment benefits contribute to equalizing the distribution of income (as reflected by a concentration coefficient of -0.29, which implies both an absolute and relative reduction in inequality).

45. There is a distinct regional pattern in the receipt of unemployment benefits. The percentage of households receiving unemployment benefits varies between six percent (South – one of the least poor regions, with low unemployment) and 13.5 percent (North-East – a high unemployment region). In general, the incidence of the beneficiaries of unemployment benefits follows closely the unemployment rate which means that the regional distribution of unemployed people without benefits is quite even (Table 17). In most regions, 30-33 percent of the unemployed receive no benefits. In the South-East and Central-East regions the figure is about 40 percent though, while in the North only 27 percent of the unemployed receive no benefits.

46. ***Family allowances*** are also proportionately more received by poor households, but to a lesser degree than unemployment benefits: 64.1 percent of poor households receive the allowances against 46.6 percent of non-poor households. The amount received by poor households (498,300 zl. per month) is also 40 percent of higher than that received by non-poor households (mainly because poor households have more children). The concentration coefficient of the family allowance is negative (-0.12), suggesting that it reduces inequality in an absolute as well as relative way, but to a lesser degree than unemployment benefits.

Table 17. Regional distribution of unemployment.

	Unemployment rate (registered only)	% of households receiving unemployment benefits	% of unemployed without benefits
Central-Capital	8.5% (2)	6.5% (3)	33%
Central	15.1% (7)	11.5% (6)	33%
Central-East	9.0% (3)	6.4% (2)	43%
Central-West	11.8% (4)	9.6% (5)	30%
North	14.9% (6)	11.9% (7)	27%
North-East	18.6% (9)	13.5% (9)	32%
South	8.2% (1)	6.0% (1)	31%
South-East	12.5% (5)	9.4% (4)	40%
South-West	17.9% (8)	12.7% (8)	32%
All	12.4%	9.3%	33%

Note: Rank of the region is in parenthesis.

47. ***Other social insurance*** (maternity and childcare) are only received by a small number of households, but three times more frequently by poor than non-poor households. This targeting is offset though by the fact that the amounts received by non-poor households are much larger than those received by the poor. The concentration coefficient of other social insurance is -0.01.

48. ***Social assistance*** is well targeted towards the poor: 9.6 percent of households below the minimum pension benefit from social assistance, against only 2.5 percent of households above the minimum wage. This ratio of almost 4:1 is the best of any component of the social safety net. It stands to reason that the income-testing of social assistance contributes to this. However, the amounts received are slightly higher for non-poor recipients. On average, farmer households receive the least amount of social assistance and social income recipient households the most. The amounts do not differ much across regions, except in the Central-Capital region

where they are well above average, and in the South and South-West where they are below average. The concentration coefficient of social assistance payments is -0.29, the same as for unemployment benefits.

49. From the point of view of social welfare, it is important to look at the ***overall allocation of social transfers*** - which combines the incidence of beneficiaries over social categories and regions, and the average amounts received by the beneficiaries. This will indicate the contribution made by each social transfer to the level of living of the households in a certain group or region, and may suggest possibilities for reallocation.

50. Tables 15 and 16 showed respectively the incidence of recipients and the amounts received. Tables 18 and 19 combine this information to show respectively the average amount of a given transfer per household, i.e. recipient and non-recipient, and the relative contribution this makes to covering the expenditure of the households in question. ***The social safety net in Poland represents 44.9 percent of the expenditure of an average household.*** Pensions are the lion's share (80 percent) of this, and by themselves contribute 36.5 percent to household expenditure. Unemployment benefits represent three percent of household expenditure and all other non-pension benefits 5.5 percent.

Table 18. Average amount of social transfers ('000 zl. per month) per household (recipients and non-recipients).

	Pension	Unemploy. benefit	Family Allowance	Other social insurance	Social assistance
Households below minimum pension	758.1	268.8	319.5	61.0	87.7
Households between minimum pension and minimum wage	1,072.3	204.3	261.7	51.9	55.5
Households above minimum wage	1,692.1	94.7	162.2	33.3	23.6
Worker	493.6	127.3	258.7	42.8	28.3
Farmer	1,032.8	110.5	140.6	39.5	18.9
Worker-farmer	1,132.2	123.0	305.7	93.9	20.8
Pensioner	3,334.8	59.0	80.2	15.4	21.3
Self-employed	404.1	74.4	233.2	32.7	5.5
Social income recipient	48.3	860.7	244.6	117.9	328.9
Central-capital	1,489.2	85.3	150.9	30.2	31.4
Central	1,449.5	163.3	155.3	48.5	48.5
Central-East	1,539.7	82.6	194.5	32.7	36.6
Central-West	1,454.3	133.2	211.9	54.7	39.9
North	1,315.3	165.1	200.3	40.9	34.3
North-East	1,450.9	190.8	193.3	42.0	40.4
South	1,641.7	72.2	184.8	23.8	24.5
South-East	1,697.0	119.0	217.2	38.5	31.1
South-West	1,583.3	165.5	183.7	38.2	27.8
All	1,532.0	123.9	188.7	38.0	33.5

Table 19. Social transfers as percentage of household expenditure (all households).

	(1) Pension	(2) Unempl. benefit	(3) Family Allow.	(4) Other social insur.	(5) Social assist.	Total	(3)+(4)+(5)
Households below minimum pension	30.3	9.2	9.6	2.0	4.0	55.1	15.6
Households between minimum pension and minimum wage	36.9	5.5	6.3	1.2	1.7	51.6	9.2
Households above minimum wage	37.2	1.8	2.7	0.5	0.5	42.7	3.7
Worker	8.2	2.6	4.8	0.8	0.6	16.9	6.2
Farmer	21.4	2.2	2.7	0.6	0.5	27.3	3.8
Worker-farmer	18.1	2.0	5.1	1.4	0.3	26.9	6.8
Pensioner	86.6	1.3	2.1	0.2	0.6	91.0	3.0
Self-employed	6.2	1.4	3.8	0.5	0.1	12.0	4.4
Social income recipient	1.3	30.2	7.6	4.0	13.7	56.7	25.2
Central-capital	34.6	1.9	2.7	0.5	1.0	40.7	4.2
Central	36.5	3.9	3.1	1.0	1.7	46.2	5.7
Central-East	37.0	1.8	3.7	0.5	1.1	44.0	5.3
Central-West	34.4	3.0	4.5	1.0	1.2	44.0	6.6
North	32.2	4.2	4.1	0.7	1.0	42.2	5.8
North-East	36.1	4.5	3.8	0.8	1.1	46.3	5.7
South	38.2	1.8	3.6	0.5	0.8	44.8	4.8
South-East	38.9	2.6	4.3	0.8	0.8	47.4	5.9
South-West	38.9	4.1	4.0	0.9	0.8	48.6	5.6
All	36.5	2.9	3.8	0.7	1.0	44.9	5.5

51. There are of course large differences in the relative importance of the social transfers for the different socio-economic groups. E.g., pensions covers 86.6 percent of household expenditure of pensioners, but less than 10 percent of those of workers and the self-employed. For the social income recipients, unemployment benefits cover 30 percent of household expenditure, and all other transfers add another 27 percent.

52. From the poverty perspective, the key question is whether the social safety net covers more of household expenditure for the poor than the non-poor. This is one way of judging the progressivity of the system. ***In total, the social safety net is mildly progressive***, representing 55.1 percent of average expenditure of households below the minimum pension and 42.7 percent of expenditure of households above the minimum wage (Table 19). However, this is the sum of two very different effects, due to pensions and the other transfers. The share of household expenditure covered by pensions is actually lower for the poor than the non-poor. In contrast, unemployment benefits contribute 9.2 percent to the expenditure of the poor and only 1.8 percent to the expenditure of the non-poor (a ratio of 5.1:1). The remaining social transfers make up 15.6 percent of the expenditure of the poor against 3.7 percent of those of the non-poor (a ratio of 4.2:1). ***The progressivity of the social safety net in Poland is thus entirely due to the non-pension components***, especially the unemployment benefits and the family allowance (Table 20).

Table 20. Poor-to-non-poor ratios of social transfers.

	Pension	Unempl. benefit	Family allowance	Other social insurance	Social assist.
Recipients (Table 15)	0.74	2.7	1.4	2.8	3.8
Amount per recipient household (Table 16)	0.60	1.1	1.4	0.6	1.0
Amount per household (Table 18)	0.45	2.8	2.0	1.8	3.7
Share of household expenditure (Table 19)	0.81	5.1	3.6	4.0	8.0

VI. Closing the Poverty Gap

53. The success of a social transfer system is not only measured by the degree to which the benefits are received by the poor (see previous section), but also by the extent to which it contributes to closing the poverty gap. If the gap is completely closed for a household, then the social transfer system has successfully lifted this household out of poverty by raising its income level, and the expenditure level made possible by this, from below to above the poverty benchmark. This is an important element of the external efficiency of the social safety net, but of course not the only element. In other words, the ultimate objective of a social safety net should not be to lift all people out of poverty in all circumstances. Apart from the fiscal implications of such objective, it would have many undesirable incentive effects. E.g. pensions may well be set at a minimum level to guarantee pensioners a decent level of living, but subject to a certain number of years of work and contributions to the system. Without such condition, a major incentive for "free riding" would be created.

54. The extent to which the social safety net reduces the poverty gap depends on the extent to which transfers go to people or households who are poor *prior to* the receipt of the given benefit and on the amount of the benefit in relation to the poverty gap. We now look at each of these two elements in turn. Table 21 shows the extent to which transfers are received by households who were poor before they received the transfer (ex-ante targeting). Of all transfers, pensions go to the largest degree to households who were poor prior to the receipt of the pension. This is not surprising since pensions are large absolute amounts and constitute the

major income source for most recipient households. Unemployment benefits and social assistance each go for more than 50 percent to households who were poor before they received these benefits. In contrast, only 20 percent of the recipients of family allowances were poor prior to the receipt of the allowance.

55. While these figures indicate a fair degree of success in ex-ante targeting, they also show that a substantial degree of leakage occurs, i.e. the existence of beneficiaries of social transfers who were not poor before they received the transfer. Looking at non-pension transfers, Table 21 indicates that at least one third of current recipients of social transfers in Poland would not be classified as poor even before they received the transfer. In the case of the family allowance, the figure is two thirds. Table 22 indicates the amounts of money this represents: from 31 percent to 60 percent of all transfers go to households who were not poor *prior* to the receipt of the transfer. ***This suggests that there is significant room in the system for reallocation in favor of the poor.***

Table 21. Ex-ante targeting of transfers (households).

	Households below minimum pension	Households between minimum pension and minimum wage	Households above minimum wage	All
Pensions	71.1%	7.7%	21.3%	100.0%
Unemployment benefit	51.8%	14.2%	34.0%	100.0%
Family allowance	19.7%	12.7%	67.6%	100.0%
Other social insurance	44.6%	18.8%	36.7%	100.0%
Social assistance	52.7%	10.7%	36.6%	100.0%

Table 22. Ex-ante targeting of transfers (amounts of money).

	Households below minimum pension	Households between minimum pension and minimum wage	Households above minimum wage	All
Pensions	76.1%	6.0%	17.9%	100.0%
Unemployment benefit	54.6%	14.0%	31.4%	100.0%
Family allowance	26.4%	13.7%	59.8%	100.0%
Other social insurance	48.7%	16.3%	35.1%	100.0%
Social assistance	59.5%	9.1%	31.4%	100.0%
Total	74.4%	6.1%	19.5%	100.0%

56. In particular, one can point at the family allowance which has many non-poor recipients. The share effectively going to the poor could be enhanced by income-testing the family allowance and/or by taxing it as ordinary income. In the latter case, the progressivity of tax rates would ensure that in net terms a larger share of the allowance goes to the poor. The fact that the allowance has recently been held steady in nominal terms has also affected the poor proportionately more. This could be addressed by indexing the allowance to the rate of inflation. The upper age limit for eligibility of the family allowance (20 years) seems excessively generous and a reduction to 18 years would free resources to pay in part for the indexation.

57. Even though social assistance is the best targeted of all social transfers, it is intended to be only available to households with incomes below the minimum pension, and the figures clearly show that in practice this is not the case. While some social assistance may well be delivered to dysfunctional households above the income benchmark, there is clearly scope to improve the income-testing of social assistance. Moreover, the amounts paid out to better-off

households could be reduced (since now they are slightly higher than those going to the poor). Vial (1994) further addresses problems in the delivery of social assistance.

58. After social assistance, the unemployment benefit is currently the social safety net component which flows to the highest extent to the poor. This may call for some reconsideration of the eligibility rules. Poverty alleviation is not an explicit goal of unemployment compensation, but the link between poverty and unemployment is so strong in Poland that unemployment benefits have a strong poverty alleviation effect. We do not advocate to increase the benefits, in order to avoid perverse incentive effects, but it could be considered to increase the period of eligibility for selected unemployed, especially people with low levels of education. In the current economic situation, they seem to have the lowest probability to find a new job. In the medium term, this problem must be addressed by pro-active labor market policies such as retraining, employment promotion, etc. In the short term, the situation of the low-skilled unemployed is only bound to worsen when their unemployment benefits run out. In order to limit the fiscal impact, extension of eligibility can be limited to workers whose highest diploma is primary education or vocational school (lower levels only) and those who have three or more children. This would be a more effective targeting method than e.g. the current system of extending benefits on a regional basis.

59. For those recipients of social transfers who are poor prior to the receipt of the transfer, one can ask the question how many of them are moved above the poverty line as a result of the transfer (Table 23). Because *pensions* are by far the largest component of the safety

net, it is not surprising that they contribute the most to keeping people out of poverty: 63 percent of households who receive pensions would become poor without them. The figure is of course higher for pensioners (79 percent), but even among farmers and mixed households over 40 percent of recipients of pensions would slide below the poverty line without them. As we saw before, the regional distribution of pensions is quite even, but it needs to be pointed out that in villages the poverty reducing effect of pensions is markedly lower than in cities.

Table 23. Poverty alleviation impact of social transfers.

	Percent of recipient households who would fall below the poverty line (minimum pension) if they did not receive social transfer				
	Pension	Unemploy. benefit	Family allowance	Other social insurance	Social assistance
Worker	28.5	27.8	5.2	19.9	17.0
Farmer	42.4	23.6	8.6	24.8	22.9
Worker-farmer	40.5	26.7	8.2	28.6	19.4
Pensioner	78.9	34.7	7.6	21.1	31.6
Self-employed	24.6	14.6	4.4	8.3	48.1
Social income recipient	36.5	37.6	12.8	27.3	29.5
Central-capital	61.6	27.8	5.6	18.8	34.9
Central	64.8	34.4	5.1	25.6	30.5
Central-East	56.5	29.5	7.5	16.3	26.4
Central-West	63.9	32.6	7.5	28.1	23.5
North	65.9	29.2	6.5	26.0	27.0
North-East	61:7	31.4	6.1	24.6	26.1
South	66.7	23.6	4.3	13.2	18.4
South-East	58.5	30.4	7.3	22.4	16.3
South-West	64.3	31.4	6.5	17.9	23.2
Cities					
>200,000 inhabitants	65.7	25.9	3.2	19.6	21.0
100-200,000 inhabitants	68.8	24.0	4.0	17.5	20.7
20-100,000 inhabitants	66.5	29.6	5.6	18.4	23.8
<20,000 inhabitants	68.0	36.3	7.5	22.1	36.0
Villages	56.5	30.7	8.9	24.8	24.2
Couple	75.1	45.1	6.7	13.6	39.8
Couple +1 child	47.6	29.7	2.3	27.8	24.4
Couple +2 children	35.9	32.3	5.8	18.2	21.1
Couple +3 children	42.2	24.1	9.8	14.9	30.7
Couple +4 or more children	21.8	22.0	15.8	19.7	24.5
Father + children	45.4	75.4	0.0	0.0	19.4
Mother + children	50.6	31.8	7.1	34.9	20.5
Other	61.6	29.0	6.2	23.2	24.3
All	62.9	30.2	6.2	21.8	24.4

60. The second best poverty alleviation effect is achieved by ***unemployment benefits***: 30 percent of recipients would be below the poverty line without the benefits. This effect is highest

in pensioner and social income recipients households. It is also larger in small cities and villages than in large cities. The poverty reduction impact of the unemployment benefit diminishes with household size: 45 percent of childless couples receiving unemployment benefits are lifted above the poverty line, but this is the case for only 22 percent of couples with four or more children. In contrast, the ***family allowance***, which is targeted by the number of children, lifts 16 percent of large recipient families out of poverty, against 2.3 percent of recipient families with one child. Overall though, the family allowances have only a small effect on poverty: 6.2 percent of recipient households are lifted above the poverty line thanks to the allowances. This finding lends further support to the suggestions made earlier: income-testing the family allowance would strengthen its progressive distribution and poverty alleviation effect. Likewise, relaxing the eligibility limits of the unemployment benefit for workers in large household would help to increase the impact of the benefit where it is most needed.

61. ***Other social insurance benefits***, while much less important in absolute amounts than the family allowance, have a relatively greater poverty impact among the recipients: for 21.8 percent of recipients, they make the difference between being poor and not being poor. The effect is strongest for farmers, mixed households and social income recipients, in villages, and in households with one child and where the head is a single mother. It should be recalled though that only a small fraction of households receive these benefits.

62. ***Social assistance***, the sole income-tested component of the safety net, helps one in four recipients escape poverty. Somewhat strangely, this effect is concentrated in low-poverty

groups such as pensioners and the self-employed, among whom only a very small percentage receive social assistance. This suggests that social assistance does reach the few needy households in those groups and makes a significant difference for them. Regionally, the poverty alleviation effect of social assistance is strongest in the Central-Capital and Central regions while it is lowest in the South and South-East.

63. Even where it does not lift households above the poverty line, the social safety net can have a major impact on households' living standards. One way to assess this is to show ***the transfers received by the poor as a fraction of the poverty gap*** (Table 24). We noted earlier that the poverty gap in Poland is 13.2 percent of the minimum pension, and that this gap is fairly steady across socio-economic groups (except social income recipients) and regions.

64. In total, the social transfers received by the poor are 215 percent of the (remaining) poverty gap. This means that without the transfers the poverty gap would be about 3.2 times larger. The last line of Table 24 also shows how the transfers received by non-poor people compare to the poverty gap. It turns out that they are almost 22 times larger than the after-transfer poverty gap and 10 times larger than the transfers received by the poor. Even after excluding pensions, transfers received by the non-poor still are more than twice as large as the poverty gap. In fact, either the unemployment benefits or the family allowance received by the non-poor would each be sufficient to more than cover the entire poverty gap. While in practice it is of course unlikely and probably undesirable that such drastic reorientation would ever take

place, it does underline that there is scope in the total resource base of the safety net to reorient funds towards the poor.

Table 24. Social transfers and the poverty gap.

	Pension	Unemploy. benefit	Family Allowance	Other social insurance	Social assistance	Total
	Social transfers received by poor households (expenditure per equivalent adult below minimum pension) as % of poverty gap					
Worker	37.5	29.9	64.5	10.6	8.5	151.0
Farmer	103.8	19.2	27.0	1.7	4.1	155.9
Worker-farmer	116.3	21.6	58.1	13.5	1.3	210.9
Pensioner	371.7	22.9	34.7	5.0	11.6	446.0
Self-employed	33.2	20.5	53.4	3.9	0.9	111.9
Social benefit recipients	4.9	105.3	37.2	15.4	38.8	201.7
All	109.1	38.7	46.0	8.8	12.7	215.1
	Social transfers received by non-poor households (expenditure per equivalent adult above minimum-wage) as % of the poverty gap					
All	1,839.7	103.0	176.3	36.2	25.6	2,180.7

65. While the figures in this section indicate that social transfers in Poland have a substantial degree of success in reaching the poor, there remain two problems. First, we have already referred to the leakage in the system, whereby one third or more of transfers go the non-poor (Table 22). Second, there remain a significant number of poor, even among those who do receive social transfers. Table 25 shows the distribution of the beneficiaries of social transfers classified according to their poverty status *after* the receipt of transfers. The vast majority of social transfer recipients are not poor after the receipts of transfers. The tables in this section have indicates the extent to which the transfer system contributes to this, by being targeted to

households who are poor before the transfer and by closing partially or completely the poverty gap for those who are poor. Among recipients of pensions, only eight percent remain in poverty after the receipt of the pension. For other transfers, the figures are higher, ranging from 13.5 percent for recipients of family allowances to 28 percent for social assistance recipients. Clearly those are the people on whom the social safety net needs to focus. The proposals made in the next section aim to reduce this remaining poverty.

Table 25. Distribution of beneficiaries of social transfers (ex-post targeting).

	Households below minimum pension	Households between minimum pension and minimum wage	Households above minimum wage	All
Pensions	8.1%	9.4%	82.5%	100.0%
Unemployment benefit	21.6%	17.0%	61.4%	100.0%
Family allowance	13.5%	12.3%	74.2%	100.0%
Other social insurance	22.8%	17.1%	60.1%	100.0%
Social assistance	28.0%	16.6%	55.4%	100.0%

VII. Four Proposals to Modify the Social Safety Net

66. The evidence in the previous sections has indicated that the social safety net in Poland is quite effective in reducing poverty incidence and the poverty gap. However, there are several aspects of the current allocation rules which are sub-optimal from the poverty alleviation perspective.

67. We present here four proposals to modify the social safety net in order to increase its progressivity and poverty reduction impact. The proposals pertain only to the non-pension components, because the reform of the pension system is discussed at length elsewhere (e.g. see World Bank, 1993). The proposals are either budget-neutral or imply only modest increases in specific social transfers (which could easily be financed out of anticipated savings from proposed reforms of the pension system).

Proposal A: Income-testing the family allowance and doubling the amount for large households

68. The family allowance has been kept steady in nominal terms at 167,000 zl. per month per eligible child since the middle of 1992. Children are eligible up to age 16, or up to age 20 if they are in school. The family allowance is received by a proportionately larger fraction of poor households and it covers a larger percentage of their expenditure (Tables 15 and 19). The failure to adjust the family allowance to cost-of-living increases has thus hurt the poor the most. It is therefore proposed to make a one-time adjustment to the allowance so that it can adequately cover various needs of children, such as textbooks, school clothing, health care, etc. at today's price levels, and to keep it constant in real terms thereafter. In order to increase the poverty reduction impact, it is also proposed to income-test the allowance and to pay it only to households with incomes below 50 percent of the average wage (on a per capita basis this corresponded to 1,759,000 zl. per month in June 93). Households with four or more children, where poverty is most pronounced, would receive twice the allowance (so long as they are below the income benchmark).

69. The net effect of income-testing the family allowance and doubling it for large households would be to reduce poverty incidence from 14.4 percent to 13.2 percent (Table 26). The beneficial impact would of course be felt the most in large households, where the poverty rate would be reduced from 43 percent to 28 percent. Poverty reductions would also be relatively concentrated in farmer, mixed, and social income recipient households, and be more pronounced in villages than in cities. There would be significant regional variation, from a minimum poverty reduction of 0.3 percentage points in the Central region to 2.3 percentage points in the Central-East region, due to the different socio-economic and urban/rural composition of each region.

Proposal B1: Reducing eligibility of the family allowance to 18 years and taxing the allowance

70. The current upper age limit of eligibility of the family allowance for school children – 20 years of age – is very generous and could be reduced to 18 years. Also, the progressivity of the allowance could be enhanced by taxing it as ordinary income (at existing tax rates). Implementing these changes would lead to significant budgetary savings, but it would also increase the poverty incidence with one percentage point. This would hurt large households the most, as well as all households with children with relatively high incomes, who are mostly found in worker and mixed households (Table 26). In practice, the budgetary savings from proposal B1 could be redistributed to the poor, and one way to do this is suggested in proposal B2.

Proposal B2: Proposal B1 plus income-tested day-care vouchers for young children

71. One phenomenon observed in Poland since transition is the reduced availability of day care, which used to be provided by state enterprises or government. Private centers have emerged but they tend to be too costly for many low- and middle-income households. This causes obvious problems for one-parent families, but even in families with couples the situation may prevent one of the parents, usually the mother, from taking up a job to enhance family income. It is proposed therefore to introduce day-care vouchers worth about 180,000 zl. per month per child (i.e. an amount similar to the family allowance) and to provide them to households with an income below the minimum pension (on a per equivalent adult or per capita basis). Children would be eligible for the vouchers if they are two to six years old.

72. In the aggregate, this proposal would offset about 80 percent of the poverty increase from reducing the age limit for the family allowance and from taxing it. The main beneficiaries are very similar to those of proposal A: large households and farmer and mixed households.

Proposal C: Improved income-testing of social assistance

73. Social assistance is currently the only income-tested component of the social safety net in Poland. Intended beneficiaries are those households with per capita incomes below the minimum pension, and who have a dysfunction which prevents them from increasing their income (see Vial, 1994, for details). Even though social assistance is better targeted than the

other social safety net components, 55 percent of beneficiaries are non-poor and the amounts paid to non-poor households are actually higher than those paid to the poor. This suggests that the targeting of social assistance could still be improved by more effective income-testing (see, again, Vial, 1994, for specific proposals on how to do this). In order to simulate the poverty impact of this, we assumed that the amounts paid out to non-poor households would be reduced by 20 percent as a result of better income-testing. On average, this would free resources to increase payments to households below the minimum pension by about 40 percent. We assumed that 30 percent would actually be paid out, and the rest be needed to cover increased administration costs as a result of the more stringent income-testing. As such, proposal C would be entirely budget-neutral.

74. Better targeting of social assistance in this fashion would reduce poverty incidence by about 0.3 percentage points (Table 26). In practice, the effect would likely be larger because the number of poor beneficiaries would also increase in addition to the larger amounts received by the poor. The beneficiaries of this proposal would be all groups with high poverty incidence and the current main recipients of social assistance (social income recipient households, mixed households, large households and those with single parents).

Proposal D: Extending eligibility for unemployment benefits for low skilled unemployed in large households.

75. Eligibility for unemployment benefits is currently limited to 12 months, except in certain high-unemployment regions and for those unemployed close to retirement age. As a

result, more than one third of all unemployed people in Poland receive no benefits. Unemployment benefits are well targeted to the poor, mainly because the loss of a job greatly increases the likelihood to be poor. However, the unemployment benefit could make a larger contribution to closing the poverty gap for social income recipient households, where many unemployed who have lost their benefits are concentrated, and also for large households. The loss of unemployment benefits is particularly severe for low-skilled people whose chances of finding jobs are low in the current economic environment. It is therefore proposed to extend the eligibility for people with low levels of education (highest diploma from elementary or lower-level vocational school) who are members of households with three or more children. This would increase the number of recipients by about seven percent, and, if eligibility was extended by 12 months, would increase the total cost of unemployment benefits by a similar percentage.

76. The impact of this would be, in the aggregate, to reduce poverty by 0.4 percentage points - an effect similar to the social assistance proposal (Table 26). However, the concentration of the effect would be different. Poverty reduction would be strongest in the social income recipient households, in the North-East and South-West regions, and in large households. Any proposal to extend unemployment benefits cannot be seen in isolation, but must be combined with pro-active labor market policies aimed, in this case, to increase the chances of finding jobs for low-education unemployed. The role of training would obviously be crucial.

Table 26. Poverty impact of selected modifications of the social · 'ety net.

	Actual Poverty Incidence	Family allowance proposals					
		Proposal A		Proposal B1		Proposal B2	
		Poverty incidence	Difference	Poverty incidence	Difference	Poverty incidence	Difference
Worker	11.0	10.1	-0.9	12.2	+1.2	11.4	+0.4
Farmer	23.3	21.3	-2.0	23.8	+0.5	22.6	-0.7
Worker-farmer	19.0	16.6	-2.4	20.5	+1.5	19.0	0.0
Pensioner	10.9	10.1	-0.8	11.4	+0.5	11.2	+0.3
Self-employed	9.0	8.8	-0.2	10.0	+1.0	9.6	+0.6
Social income recipient	55.9	52.4	-3.5	57.5	+1.6	55.9	0.0
Central-capital	9.6	8.7	-0.9	10.2	+0.6	9.8	+0.2
Central	11.2	10.9	-0.3	11.9	+0.7	11.5	+0.3
Central-East	16.5	14.2	-2.3	17.9	+1.4	16.7	+0.2
Central-West	17.0	15.4	-1.6	18.1	+1.1	17.2	+0.2
North	14.1	13.4	-0.7	15.0	+0.9	14.3	+0.2
North-East	15.3	13.3	-2.0	16.3	+1.0	15.0	-0.3
South	10.9	10.0	-0.9	11.6	+0.7	10.9	0.0
South-East	18.4	16.8	-1.6	19.9	+1.5	19.0	+0.6
South-West	16.8	15.9	-0.9	17.9	+1.1	17.4	+0.6
Cities							
>200,000 inhabitants	5.5	5.3	-0.2	5.8	+0.3	5.5	0.0
100-200,000 inhabitants	7.9	7.3	-0.6	8.5	+0.6	8.2	+0.3
20-100,000 inhabitants	11.4	10.8	-0.6	12.6	+1.2	12.1	+0.7
<20,000 inhabitants	14.2	13.5	-0.7	15.6	+1.4	14.7	+0.5
Villages	22.1	19.9	-2.2	23.4	+1.3	22.2	+0.1
Couple	3.4	3.4	0.0	3.4	0.0	3.4	0.0
Couple +1 child	6.1	6.1	0.0	6.4	+0.3	6.1	0.0
Couple +2 children	11.7	11.7	0.0	12.8	+1.1	11.7	0.0
Couple +3 children	22.9	22.8	-0.1	25.0	+2.1	23.0	+0.1
Couple +4 or more children	42.6	28.1	-14.5	46.0	+3.4	44.1	+1.5
Father + children	9.7	9.7	0.0	9.7	0.0	9.7	0.0
Mother + children	16.4	15.3	-1.1	17.1	+0.7	16.7	+0.3
Other	15.6	14.6	-1.0	16.5	+0.9	15.9	+0.3
All	14.4	13.2	-1.2	15.4	+1.0	14.6	+0.2

	Social assistance proposal		Unemployment benefits proposal	
	Poverty incidence	Difference	Poverty incidence	Difference
Worker	10.8	-0.2	10.6	-0.4
Farmer	23.2	-0.1	23.1	-0.2
Worker-farmer	18.8	-0.2	18.7	-0.3
Pensioner	10.7	-0.2	10.6	-0.3
Self-employed	9.0	0.0	9.0	0.0
Social income recipient	51.8	-4.1	53.4	-2.5
Central-capital	9.3	-0.3	9.3	-0.3
Central	10.6	-0.6	10.9	-0.3
Central-East	16.2	-0.3	16.1	-0.4
Central-West	16.5	-0.5	16.8	-0.2
North	13.9	-0.2	14.0	-0.1
North-East	15.0	-0.3	14.6	-0.7
South	10.7	-0.2	10.5	-0.4
South-East	18.2	-0.2	17.9	-0.5
South-West	16.5	-0.3	16.1	-0.7
Cities				
>200,000 inhabitants	5.2	-0.3	5.5	0.0
100-200,000 inhabitants	7.7	-0.2	7.8	-0.1
20-100,000 inhabitants	11.1	-0.3	11.1	-0.3
<20,000 inhabitants	13.9	-0.3	13.6	-0.6
Villages	21.8	-0.3	21.5	-0.6
Couple	3.4	0.0	3.4	0.0
Couple +1 child	5.7	-0.4	6.1	0.0
Couple +2 children	11.4	-0.3	11.7	0.0
Couple +3 children	22.6	-0.3	21.7	-1.2
Couple +4 or more children	42.1	-0.5	40.9	-1.7
Father + children	8.3	-1.4	9.7	0.0
Mother + children	13.8	-2.6	16.0	-0.4
Other	15.4	-0.2	15.1	-0.6
All	14.1	-0.3	14.0	-0.4

Note: Family allowance proposal A: Income-testing the family allowance and doubling the amount for large households.
Family allowance proposal B1: Reducing eligibility to 18 years and taxing the allowance.
Family allowance proposal B2: Same as proposal B1, plus income-tested day-care vouchers for young children.
Social assistance proposal: Improved income-testing of social assistance.
Unemployment benefits proposal: Extending unemployment benefits to low skilled unemployed in large households.
A more detailed description of each proposal is in the text. The projections in this table are based on the actual household composition and income and expenditure levels of households as they existed over the period January-June 1993.

VIII. Conclusion

77. Since the start of transition in Poland in January 1990, the social safety net has undergone important changes. The majoı one was the introduction of unemployment benefits, as a result of rapidly emerging unemployment. The total cost of the social safety net has risen sharply, both in absolute real terms and as a fraction of GDP. In the climate of fiscal stringency, the Government of Poland has understandably been concerned to control the growth of the social budget and to ensure that spending achieves the desired distributional objectives. Therefore, this study has investigated what the distributional impact is of the current system, and how it helps to alleviate poverty in Poland.

78. In 1993, 26.3 percent of the population had an expenditure level (per equivalent adult) below the minimum wage, and 14.4 percent had expenditure below the minimum pension. The highest and the lowest ***poverty incidence*** occurs in the two new groups which have emerged since transition, respectively, the social income recipients and the self-employed. This suggests that transition has widened the distribution of the level of living by extending the two ends of the distribution. The second lowest poverty incidence occurs among pensioners and workers, of whom about 11 percent live below the minimum pension. For pensioners, this is a reversal of the situation prior to transition, when they consistently had the highest poverty figures. For groups with an active connection to the labor market, the highest poverty is now recorded among farmers.

79. The ***regional variation*** in poverty incidence is less pronounced than across socio-economic group. Nevertheless, there is a spatial dimension to poverty: poverty incidence is much higher in villages and in small cities. In large cities (more than 200,000 inhabitants), only 5.5 percent of people live below the minimum pension. This percentage uniformly rises with smaller city size, and reaches 22 percent in villages.

80. ***Demographic characteristics*** are important indicators of poverty in Poland. This is especially the case for type of household. Only 3.4 percent of childless couples fall below the minimum pension - many of these households are pensioners. The poverty incidence rises steadily with the number of children. Among households with four or more children, 42.6 percent have an expenditure level per equivalent adult below the minimum pension, and 60.8 percent fall below the minimum wage.

81. One corollary of this is that ***poverty among children*** is high in Poland - one in five children lives in a household with an expenditure level below the minimum pension. In contrast, the ***poverty rate among elderly people*** (60+) is only 7.6 percent - one half the national average. The strong correlation between poverty and presence of children in the household, makes the presence of children an important candidate for the targeting of social transfers. Currently, only the family allowance and maternity care are based on this criterion. By the same token, the social safety net seems quite effective at protecting elderly people against poverty and further old-age-based interventions do not appear warranted at this time.

82. There is a strong inverse link between ***poverty and education.*** Where the head of household has only vocational or elementary education, poverty incidence is twice as high as in households with more education. Almost two thirds of the Polish population lives in households where the head has only vocational or elementary education.

83. One remarkable feature of the poverty profile in Poland is the relatively low ***poverty gap*** and its very even distribution across all socio-economic groups, regions, or types of households. The average poverty gap is 16 percent of the minimum wage and 13 percent of the minimum pension and varies by no more than two to three percentage points regardless of the classification considered. This indicates that there is no one group or region in Poland which forms a pocket of deep poverty (at least at the level of aggregation considered in this study). The sole exception is the social income recipients who not only have the highest poverty incidence but whose poverty is also more severe than any other group.

84. ***Unemployment*** is a major cause of poverty in Poland. The poverty rate among households where there is at least one unemployed person is 27.8 percent – almost twice the national average. Over one third of all poor live in households where there is an unemployed member. The strong link between poverty and unemployment indicates that pro-active labor market policies aimed at employment creation need to be an important ingredient of poverty alleviation policy in Poland. Where these policies are geared in the first place to providing work to the unemployed, they will have the most immediate poverty alleviation impact. However, the

link between poverty and education suggests that improved training and education deserves an important role in poverty alleviation for the medium and longer term.

85. ***The social safety net in Poland represents 44.9 percent of the expenditure of an average household.*** Pensions are the lion's share of this, and by themselves contribute 36.5 percent to household expenditure. Unemployment benefits represent three percent of household expenditure and all other non-pension benefits 5.5 percent.

86. ***The social safety net is mildly progressive,*** representing 55.1 percent of average expenditure of households below the minimum pension and 42.7 percent of expenditure of households above the minimum wage. However, this is the sum of two very different effects, due to pensions and the other transfers. The share of household expenditure covered by pensions is actually lower for the poor than the non-poor. In contrast, unemployment benefits contributes 9.2 percent to the expenditure of the poor and only 1.8 percent to the expenditure of the non-poor (a ratio of 5.1:1). The remaining social transfers make up 15.6 percent of the expenditure of the poor against 3.7 percent of those of the non-poor (a ratio of 4.2:1). The progressivity of the social safety net in Poland is thus entirely due to the non-pension components, especially the unemployment benefits and the family allowance.

87. The success of a social transfer system is not only measured by the degree to which the benefits are received by the poor, but also by the extent to which it contributes to ***closing the poverty gap***. This depends on the extent to which transfers go to people or households who

are poor *prior* to the receipt of the given benefit (ex-ante targeting) and on the amount of the benefit in relation to the poverty gap. While the social transfer system in Poland is fairly successful in ex-ante targeting, a substantial degree of leakage occurs. Unemployment benefits and social assistance go for almost 50 percent to households who were not poor (above minimum pension) before they received these benefits. In the case of family allowance, 80 percent of recipients were not poor prior to the receipt of the allowance. This means that, depending on the type of transfer, from 30 to 60 percent of the amounts of money being transferred go to the non-poor. ***This suggests that there is significant room in the system for reallocation in favor of the poor.***

88. In particular, one can point at the family allowance which has many non-poor recipients. The share effectively going to the poor could be enhanced by income-testing the family allowance and/or by taxing it as ordinary income. In the latter case, the progressivity of tax rates would ensure that in net terms a larger share of the allowance goes to the poor. The fact that the allowance has recently been held steady in nominal terms has also affected the poor proportionately more. This could be addressed by indexing the allowance to the rate of inflation. The upper age limit for eligibility of the family allowance (20 years) seems excessively generous and a reduction to 18 years would free resources to pay in part for the indexation.

89. Even though social assistance is the best targeted of all social transfers, it is intended to be only available to households with incomes below the minimum pension, and the figures in this study show that in practice this is not the case. While some social assistance may well

be delivered to dysfunctional households above the income benchmark, there is clearly scope to improve the income-testing of social assistance. Moreover, the amounts paid out to better-off households could be reduced (since now they are slightly higher than those going to the poor).

90. After social assistance, the unemployment benefit is the social safety net component which flows to the highest extent to the poor. This may call for some reconsideration of the eligibility rules. Poverty alleviation is not an explicit goal of unemployment compensation, but the link between poverty and unemployment is so strong in Poland that unemployment benefits have a strong poverty alleviation effect. We do not advocate to increase the benefits, in order to avoid perverse incentive effects, but it could be considered to increase the period of eligibility for selected unemployed, especially people with low levels of education. In the current economic situation, they seem to have the lowest probability to find a new job. In the medium term, this problem must be addressed by pro-active labor market policies such as retraining, employment promotion, etc. In the short term, the situation of the low-skilled unemployed is only bound to worsen when their unemployment benefits run out. In order to limit the fiscal impact, extension of eligibility could be limited to workers whose highest diploma is primary education or vocational school (lower levels only) and those who have three or more children.

91. A further assessment of the social safety net's ability to help the poor can be made by showing the ***transfers received by the poor as a fraction of the poverty gap***. In total, the social transfers received by the poor are 215 percent of the (remaining) poverty gap. This means that without the transfers the poverty gap would be about 3.2 times larger. However, the

transfers received by non-poor people are almost 22 times larger than the poverty gap. The unemployment benefit and the family allowances received by non-poor households would each be sufficient to more than cover the entire poverty gap. While in practice it is of course unlikely and probably undesirable that such drastic reorientation would ever take place, it does underline that there is scope in the total resource base of the safety net to reorient funds towards the poor.

92. In line with the recommendations made earlier, this reported presented ***four proposals*** to improve selectively the poverty reduction impact of social transfers other than pensions. The proposals are either budget-neutral or imply only modest increases in the total amount of transfers (which could easily be financed out of anticipated savings from proposed reforms of the pension system).

93. ***Proposal A: Income-testing the family allowance and doubling the amount for large households.*** This responds to the situation whereby the freezing of the nominal amount of the family allowance since mid-1992 has disproportionately hurt the poor. A one-time revision of the amount is recommended to ensure adequate coverage of a basket of children's goods and services at today's prices, after which the amount would remain constant in real terms. The proposal also aims to reduce poverty among children, which is twice the national average in Poland. Overall, the proposal would reduce poverty from 14.4 percent to 13.2 percent, but among large households the reduction would be from 43 percent to 28 percent. The proposal would also benefit farmer households and rural areas in general.

94. ***Proposal B: Reducing eligibility of family allowance to 18 years and taxing the allowance; providing income-tested day-care vouchers for young children.*** The first part of this proposal aims to reduce a generous eligibility criterion and to improve the progressivity of the family allowance. This would however raise poverty by about one percentage point, especially among large households and worker households. The day-care vouchers would largely compensate for this effect. They would also have beneficial indirect effects, by releasing an important current constraint, especially on mothers, to take up a job.

95. ***Proposal C: Improved income-testing of social assistance.*** Social assistance is currently the only income-tested component of the social safety net in Poland. Even though social assistance is better targeted than the other social safety net components, 55 percent of beneficiaries are non-poor and the amounts paid to non-poor households are actually higher than those paid to the poor. This suggests tnat the targeting of social assistance could be still improved by more effective income-testing. If improved income-testing reduces payments to non-poor households by 20 percent, this would permit an increase of payments to poor households by 30 percent and cover increased administration costs of the income-testing, in a budget-neutral fashion. Poverty would be reduced by about 0.3 percentage points.

96. ***Proposal D: Extending eligibility for unemployment benefits for low skilled unemployed in large households.*** Current eligibility for unemployment benefits is limited to 12 months in most cases. This hurts disproportionately low-skilled workers whose chances of finding a job are low in the current economic environment. The unemployment benefit could

also make a larger contribution to closing the poverty gap for social income recipients households where many unemployed who have lost their benefits are concentrated, and for large households. It is proposed to extend the eligibility for unemployed whose highest education is primary or lower vocational school and who are members of large households. An extension by 12 months would increase recipients by about seven percent. It would reduce poverty by about 0.4 percent, but concentrated in current high-poverty groups.

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The 1993 Household Budget Survey

The main data source for this report was the first six months (January-June) of the 1993 Household Budget Survey, undertaken by the Polish Central Statistical Office (GUS). Over this period, 16,051 households were enumerated, providing detailed data on household income and expenditures, as well as selected demographic and socio-economic information on household members.

The survey is part of a long tradition of annual household budget surveys in Poland, consisting of both cross-sectional and panel data. These surveys were meant to provide representative data on the four main socio-economic groups in Poland: worker households, farmer households, mixed farmer/worker households and pensioner households. In 1993, an important innovation was introduced to take into account the new economic reality since economic transition began in 1990. In particular, the coverage and stratification of the survey was broadened to include households whose main source of income was self-employment in the non-agricultural private sector (hereafter called "self-employed"), and those who lived primarily from social transfers other than pensions and/or from casual work (hereafter called "social income recipients"). Thus 1993 is the first year that the Polish population was covered in its entirety by the survey.

Table A1.1 shows the distribution of survey respondents by region and socio-economic group, over the period January-June 1993 (16,044 households – seven households were dropped from the sample due to missing information).

Table A1.1. Original household sample distribution by region and SEG.

Frequency (Percent)	Worker	Farmer	Mixed Worker-Farmer	Pensioner	Self-employed	Social income recipient	Total income
Central-Capital	920 (5.73)	181 (1.13)	107 (0.67)	625 (3.90)	111 (0.69)	65 (0.41)	2,009 (12.52)
Central	622 (3.88)	172 (1.07)	88 (0.55)	443 (2.76)	65 (0.41)	54 (0.34)	1,444 (9.00)
Central-East	290 (1.81)	175 (1.09)	101 (0.63)	241 (1.50)	20 (0.12)	16 (0.10)	843 (5.25)
Central-West	1,047 (6.53)	219 (1.36)	119 (0.74)	659 (4.11)	125 (0.78)	80 (0.50)	2,249 (14.02)
North	879 (5.48)	61 (0.38)	32 (0.20)	458 (2.85)	84 (0.52)	76 (0.47)	1,590 (9.91)
North-East	372 (2.32)	142 (0.89)	34 (0.21)	304 (1.89)	38 (0.24)	42 (0.26)	932 (5.81)
South	1,605 (10.00)	51 (0.32)	78 (0.49)	1,004 (6.26)	143 (0.89)	60 (0.37)	2,941 (18.33)
South-East	821 (5.12)	254 (1.58)	348 (2.17)	730 (4.55)	104 (0.65)	60 (0.37)	2,317 (14.44)
South-West	853 (5.32	45 (0.28)	42 (0.26)	610 (3.80)	86 (0.54)	83 (0.52)	1,719 (10.31)
Total	7,409 (46.18)	1,300 (8.10)	949 (5.91)	5,074 (31.63)	776 (4.84)	536 (3.34)	16,044 (100.00)

Note: For the definition of regions, see Annex 2.

As in the past, the 1993 sample was designed to be a self-weighting probability sample. However, also in line with past experience, the survey encountered a fairly large rate of non-participation (refusal, drop-out, etc.), in the order of 30 percent. Since this non-participation is not random, it becomes necessary to assign weights to observations to restore representativeness. This was done by GUS according to the two main stratification criteria: socio-economic group and household size. Table A1.2 shows the set of weights applicable to the January-June 1993 data (after normalization to keep the degrees of freedom of the sample constant).

Table A1.2. Corrective weights for January-June 1993 Household Budget Survey.

	Socio-Economic Group					
Household size	Worker	Farmer	Mixed Worker-farmer	Pensioner	Self Employed	Social income recipient
1	1.275	1.161	2.109	1.264	1.230	1.243
2	0.973	1.090	1.021	1.048	1.128	0.972
3	0.929	0.973	0.890	0.940	0.850	1.018
4	0.938	1.050	0.965	0.981	0.936	0.885
5	0.900	0.979	0.971	0.833	0.967	0.844
6+	0.921	0.975	0.959	0.945	0.967	0.976

Application of these weights to table A1.1 yields the "corrected" distribution of the households in the sample, which was used for the analysis in the paper.

Table A1.3. Corrected household sample distribution, by region and SEG.

Frequency (Percent)	Worker	Farmer	Mixed worker-farmer	Pensioner	Self employed	Social income recipient	Total
Central-capital	879 (5.48)	184 (1.15)	102 (0.63)	693 (4.32)	105 (0.66)	67 (0.42)	2,030 (12.65)
Central	594 (3.70)	175 (1.09)	87 (0.54)	491 (3.06)	61 (0.38)	55 (0.34)	1,463 (9.12)
Central-East	274 (1.71)	178 (1.11)	98 (0.61)	261 (1.62)	19 (0.12)	15 (0.09)	844 (5.26)
Central-West	990 (6.17)	222 (1.38)	114 (0.71)	712 (4.44)	118 (0.74)	78 (0.49)	2,234 (13.92)
North	831 (5.18)	62 (0.38)	31 (0.19)	4[illegible]9 (3.11)	7[illegible] (0.49)	74 (0.46)	1,575 (9.81)
North-East	353 (2.20)	144 (0.89)	32 (0.20)	328 (2.05)	35 (0.22)	41 (0.25)	934 (5.82)
South	1,527 (9.52)	52 (0.32)	77 (0.48)	1,093 (6.82)	135 (0.84)	60 (0.38)	2,945 (18.36)
South-East	777 (4.84)	260 (1.62)	333 (2.08)	783 (4.88)	100 (0.62)	58 (0.36)	2,310 (14.40)
South-West	808 (5.04)	46 (0.29)	40 (0.25)	655 (4.08)	81 (0.51)	79 (0.50)	1,710 (10.66)
Total	7,033 (43.83)	1,322 (8.24)	913 (5.69)	5,514 (34.37)	735 (4.58)	528 (3.29)	16,044 (100.00)

Annex 2

Inflation and Regional Price Differences

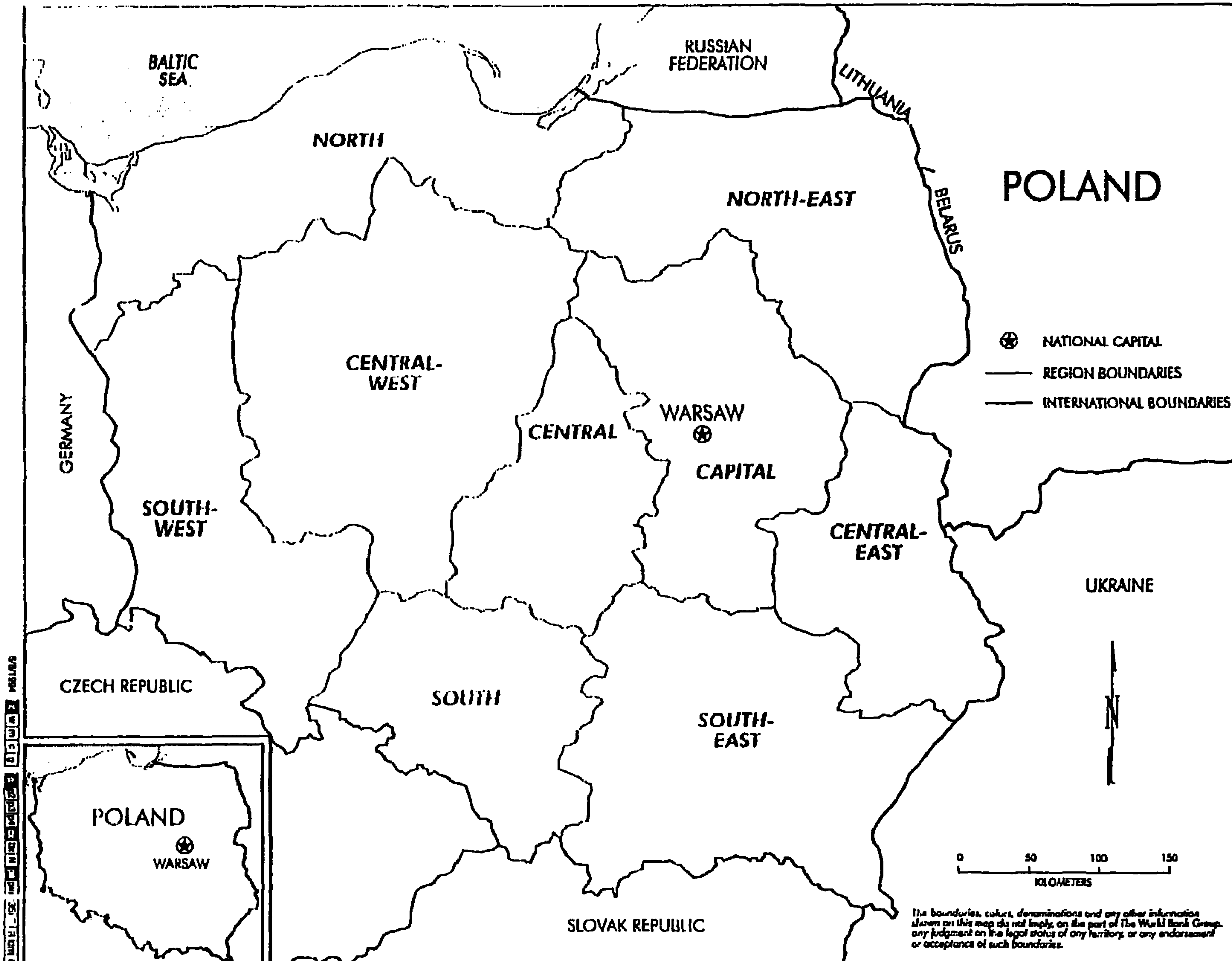
The household expenditure data used in this report have been expressed in June 1993 Warsaw prices. This required the use of two price deflators. Since the expenditure data were collected monthly, the monthly CPI was used to express all expenditures in June 1993 prices.

	Monthly CPI
January 1993	89.700
February 1993	92.750
March 1993	94.698
April 1993	96.876
May 1993	98.619
June 1993	100.00

Next, regional price differences were taken into account. Average prices were obtained from GUS for 212 household expenditure items, for each voivodship. The latter were aggregated into nine regions (Table A2.1 and map). The 212 items were combined into 37 expenditure categories, as used by GUS to calculate the CPI (Table A2.2). Then, a Paasche index was constructed using the Warsaw region ("Central-capital") as reference region (Table A2.3). Even though some price differences of 20-30 percent or more were observed for a number of items, when aggregated into expenditure categories regional price differences did not exceed five percent in most cases (table A2.4). However, the regional price differences for services were somewhat larger than for goods. As Table A2.3 shows, for expenditures as a whole, regional price differences do not exceed two percent. For the analysis in the paper, household expenditures were divided by this regional price index, which ensures that measures of level of living and poverty are properly adjusted for regional price differences.

Table A2.1. Classification of voivodships into regions.

Region	Voivodship
1. Central-capital	St. Warszawskie, Ciechanowskie, Ostroleckie, Radomskie, Siedleckie
2. Central	Lodzkie, Piotrkowskie, Plockie, Sieradzkie, Skiemiewickie
3. Central-East	Bialskopodlaskie, Chelmskie, Lubelskie, Zamojskie
4. Central-West	Bydgoskie, Kaliskie, Koninskie, Leszczynskie, Pilskie, Poznanskie, Torunskie, Wlocklawskie
5. North	Elblaskie, Gdanskie, Koszalinskie, Slupskie, Szczecinskie
6. North-East	Bialostockie, Lomzynskie, Olsztynskie, Suwalskie
7. South	Bielskie, Czestochowskie, Katowickie, Opolskie
8. South-East	Kieleckie, Krakowskie, Krosnienskie, Nowosadeckie, Przemyskie, Rzeszowskie, Tarnobrzeskie, Tarnowskie
9. South-West	Gorzowskie, Jeleniogorskie, Legnickie, Walbrzyskie, Wrocklawskie, Zielonogorskie


POLAND
BALTIC SEA
RUSSIAN FEDERATION
LITHUANIA
BELARUS
UKRAINE
GERMANY
CZECH REPUBLIC
SLOVAK REPUBLIC
NORTH
NORTH-EAST
CENTRAL-WEST
CENTRAL
WARSAW
CAPITAL
CENTRAL-EAST
SOUTH-WEST
SOUTH
SOUTH-EAST
NATIONAL CAPITAL
REGION BOUNDARIES
INTERNATIONAL BOUNDARIES
0
50
100
150
KILOMETERS
N
POLAND
WARSAW
The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.

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A2.4

Table A2.2. Expenditure categories for price index.

Goods	72.50%
Foods	38.93%
1. Cereals, bread, macaroni, flour, etc.	4.66%
2. Potatoes, fruits and vegetables	5.74%
3. Meat and meat products	12.66%
4. Fish and fish products	1.08%
5. Fat (butter, oil, etc.)	2.55%
6. Dairy products	3.80%
7. Eggs	0.81%
8. Sugar and sugar products	2.70%
9. Other foods	2.83%
10. Food in restaurants	2.10%
Alcohol	4.58%
11. Wine, beer, vodka, etc.	4.58%
Non-food	28.99%
12. Clothing	5.19%
13. Shoes	2.41%
14. Furniture and housing equipment	2.90%
15. Coal and products for heating	2.45%
16. Medication	1.45%
17. Washing, cleaning and beauty products	2.78%
18. Books, magazines, newspapers, stationary	1.40%
19. Electronic devices, music instruments, toys and sport goods	1.23%
20. Clocks, watches and jewelry	0.15%
21. Cars, bicycles, etc.	1.06%
22. Gasoline and oil (for cars)	2.51%
23. Tobacco products	2.19%
24. Other non-food items	3.27%
Services	27.50%
25. Dressmaking and shoe repair	0.26%
26. Housing (rent, repairs)	3.98%
27. Central heating and hot water	2.98%
28. Electricity	3.05%
29. Gas (for cooking and heating)	1.91%
30. Health care	0.97%
31. Cleaning, laundry and beauty	0.47%
32. Education	1.75%
33. Sport, recreation and culture	2.56%
34. Transportation	2.06%
35. Car maintenance	0.72%
36. Communication	0.91%
37. Other services	5.28%

Table A2.3. Regional price index.

Central-capital	100.00
Central	99.18
Central-East	98.58
Central-West	98.14
North	100.95
North-East	100.42
South	100.79
South-East	98.16
South-West	102.08

Table A2.4. Regional price relatives by expenditure category.

Expenditure category	Central-capital	Central	Central-East	Central-West	North	North-East	South	South-East	South-West
Cereals, bread, macaroni, flour, etc.	1.00	1.00	0.99	0.96	0.99	0.99	0.99	0.97	1.01
Potatoes, fruits and vegetables	1.00	0.98	0.91	1.02	1.06	1.00	1.06	0.95	1.07
Meat and meat products	1.00	1.00	0.98	0.96	0.99	0.97	1.01	0.98	1.04
Fish and fish products	1.00	0.96	0.98	0.98	0.97	1.00	0.97	1.00	1.01
Fat (butter, oil, etc.)	1.00	1.04	1.04	0.93	0.99	1.00	1.01	1.02	0.99
Dairy products	1.00	0.95	0.97	0.97	1.01	0.98	0.99	0.99	1.02
Eggs	1.00	1.02	0.94	1.01	0.98	1.00	1.03	1.04	1.01
Sugar and sugar products	1.00	0.96	0.95	0.99	0.99	0.99	0.99	0.97	1.02
Other foods	1.00	1.01	1.03	0.97	0.98	1.01	1.00	0.97	1.00
Food in restaurants	1.00	0.99	0.98	0.97	1.00	0.99	1.01	0.98	1.03
Wine, beer, vodka, etc.	1.00	1.01	1.02	1.02	1.07	1.07	1.07	1.00	1.07
Clothing	1.00	0.99	1.03	1.01	1.06	1.11	1.06	1.01	1.08
Shoes	1.00	0.98	0.97	0.98	1.05	1.00	1.03	0.94	1.05
Furniture and housing equipment	1.00	1.00	1.03	0.97	1.02	1.08	1.04	1.00	1.05
Coal and products for heating	1.00	1.00	0.91	0.95	0.99	0.96	0.81	0.90	0.94
Medication	1.00	0.98	1.01	1.00	0.98	0.97	0.99	0.98	0.99
Washing, cleaning and beauty products	1.00	0.99	1.03	0.98	1.01	1.10	1.05	0.99	1.07
Books, magazines, newspapers, stationary	1.00	1.03	0.96	0.97	0.99	1.01	1.03	1.02	1.01

A2.6

Expenditure category	Central-capital	Central	Central-East	Central-West	North	North-East	South	South-East	South-West
Electronic devices, music instruments, toys and sport goods	1.00	1.00	1.02	1.01	1.08	1.01	1.01	0.99	1.01
Clocks, watches and jewelry	1.00	1.08	1.04	0.97	1.04	1.33	1.11	1.08	1.08
Cars, bicycles, etc.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Gasoline and oil (for cars)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Tobacco products	1.00	0.99	1.01	1.01	1.02	0.97	1.02	1.02	1.03
Other non-food items	1.00	1.00	1.02	0.99	1.03	1.07	1.04	0.99	1.05
Housing (rent, repairs)	1.00	0.97	1.01	1.00	1.01	0.97	0.99	1.00	1.02
Central heating and hot water	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Electricity	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Gas (for cooking and heating)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Health care	1.00	0.90	0.84	0.88	0.96	0.92	0.92	0.88	0.82
Cleaning, laundry and beauty	1.00	0.94	0.75	0.85	0.96	0.90	0.94	0.93	0.97
Education	1.00	0.98	0.92	1.00	1.04	1.01	1.01	0.98	1.03
Sport, recreation and culture	1.00	1.02	1.00	0.98	0.99	0.96	0.99	0.95	0.99
Transportation	1.00	0.96	0.99	0.97	0.97	0.98	0.99	0.97	0.98
Communication	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Other services	1.00	0.98	0.95	0.96	0.99	0.97	0.98	0.97	0.98

Poverty and the Composition of Household Income and Expenditure

This paper has focused on the social safety net as a policy tool to help the poor. There are of course many other ingredients of a poverty alleviation policy. We made a brief reference in the paper to education policy, in view of the strong link in Poland between a low level of education on the one hand, and unemployment and poverty on the other hand. Suitable labor market policies, ranging from better vacancy information systems and placement offices to training and retraining, public works, promotion of small-scale enterprises, etc. can all have important poverty implications (see Rutkowski, 1994). In general, policies to enhance returns to labor are likely to help the poor, who now derive a below-average share of income from work (table A3.1). On the outflow side, the pattern of household expenditure differs markedly between the poor and non-poor and across socio-economic groups as well (Table A3.2). Policies to reduce or abolish subsidies will thus have varying implications on different household groups. Since it is outside the scope of this paper to develop policy suggestions in these areas, the following two tables on the composition of household income and expenditure by poverty category and socio-economic group are provided merely as basic information, and to meet several requests to that effect.

A3.2

Table A3.1. The composition of household income

	Percentage of income from				
	Work	Social transfers	Gifts	Other	Total
Households below minimum pension	30.2	51.2	5.8	12.7	100.0
Households between minimum pension and minimum wage	36.0	48.6	3.7	11.6	100.0
Households above minimum wage	43.4	46.3	4.0	6.4	100.0
Worker	79.4	16.2	3.4	1.2	100.0
Farmer	0.7	36.9	3.7	58.8	100.0
Worker-farmer	52.9	25.1	1.4	20.6	100.0
Pensioner	5.0	89.8	2.7	2.6	100.0
Self-employed	27.2	52.3	13.9	6.6	100.0
Social income recipient	3.5	70.5	23.4	2.6	100.0
All	41.3	47.1	4.1	7.5	100.0

Table A3.2. The composition of household expenditure.

	Percentage of expenditure for									
	Food	Alcohol & Tobacco	Clothing	Home maint-enance	Other goods	Health	Education & leisure	Transp. & communication	Other services & taxes	Total
Households below minimum pension	60.1	3.1	3.1	9.9	1.2	4.8	3.0	3.9	11.0	100.0
Households between minimum pension and minimum wage	52.0	3.0	3.7	12.0	1.6	5.2	3.5	4.8	14.2	100.0
Households above minimum wage	39.2	2.6	5.5	15.0	2.7	6.2	5.3	6.7	16.7	100.0
Worker	38.9	2.9	5.7	13.8	2.4	5.4	6.2	7.1	17.6	100.0
Farmer	57.1	3.3	5.3	8.9	2.2	5.0	3.3	6.4	8.6	100.0
Worker-farmer	50.7	2.9	5.8	8.8	2.5	4.6	3.4	7.5	13.8	100.0
Pensioner	41.9	2.1	4.0	17.0	2.5	7.2	3.6	4.5	17.3	100.0
Self-employed	41.4	3.0	6.5	13.3	2.4	5.9	7.0	10.1	10.5	100.0
Social income recipient	53.4	4.1	4.8	14.4	2.0	5.6	4.8	4.3	6.6	100.0
All	42.7	2.7	5.1	14.2	2.4	6.0	4.9	6.2	15.8	100.0

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